BRITISH BIRDS

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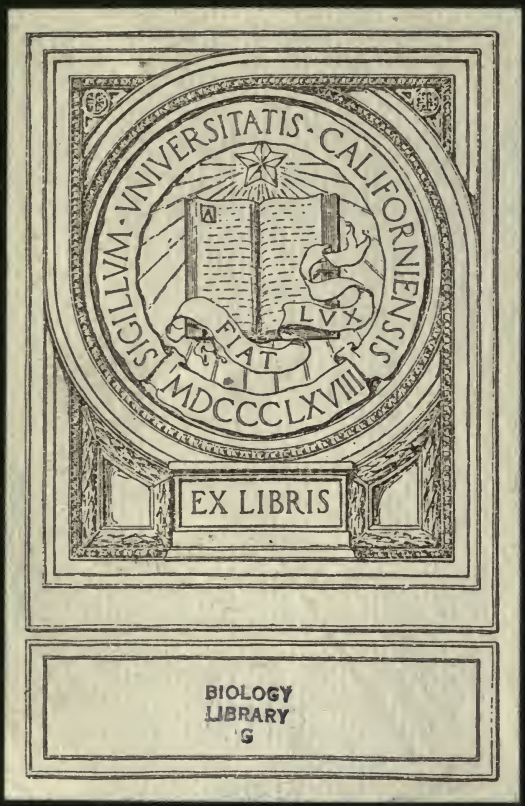

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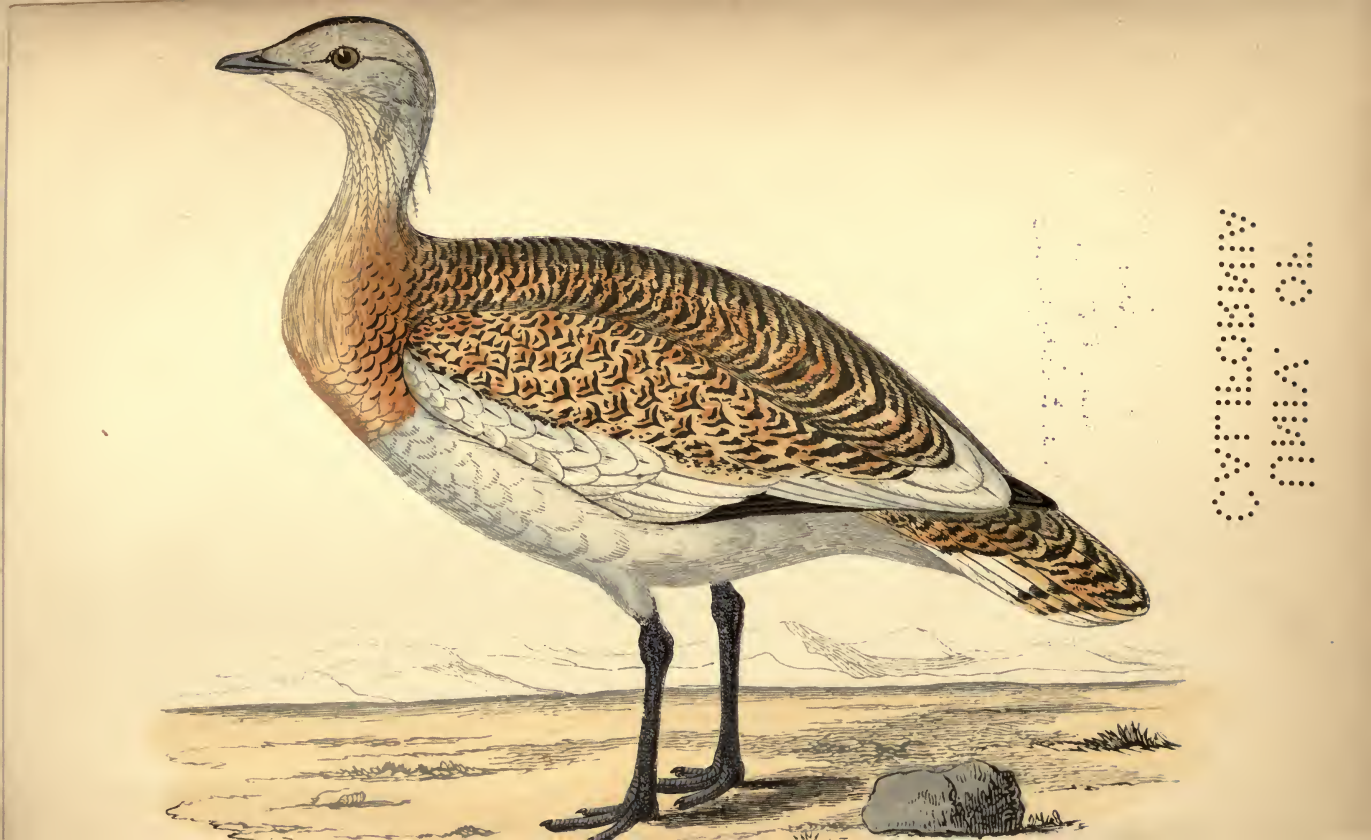

A HISTORY OF BRITISH BIRDS.

BY

THE REV. F. O. MORRIS, B.A.,

MEMBER OF THE ASHMOLEAN SOCIETY.

VOL. V.

CONTAINING FORTY-SEVEN COLOURED ENGRAVINGS.

'Gloria in excelsis Deo.'

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HISTORY OF BRITISH BIRDS.

GREAT BUSTARD.

Otis tarda, PENNANT. MONTAGU.

Otis—A Bustard. *Tarda*—Slow—lazy.

THE Bustard is frequent in Asia in Tartary and Syria; and in Europe in Russia, as also in Germany, Italy, Spain, Dalmatia, and France; rare in Holland and Sweden.

This was formerly an actual British bird, though living now only among us in the pages of history. In the catalogue of the collection made by Tradescant, the basis of the present Ashmolean Museum at Oxford, it is spoken of as being taken with greyhounds on Newmarket Heath, but it seems from what is presently to be stated that this could not well have been the case. The Rev. Leonard Jenyns, in his 'Observations on the Ornithology of Cambridgeshire,' published in 1821, says that till within a few years single individuals had been seen about there, but that they were then supposed to be almost extinct; one, however, a young male, was shot on Shelford Common in January, 1830, and another at Caxton, in December, 1832. Ray and Willughby also mention Royston Heath as a place frequented in their time by this species. Salisbury Plain, Wiltshire, was another noted locality for it; one was shot there on the 29th. of September, 1800, and there were two others in company with it. In the summer of 1801 two were seen there, and they are reported to have attacked mounted horsemen; one of them was captured; another, a female, occurred there to G. R. Waterhouse, Esq., on the 9th. of August, 1849.

It was also known in Hampshire, and Gilbert White mentions his having been informed of eighteen once seen together near

Winchester. The 'South Downs' of Sussex likewise furnished it. In Suffolk it was known, and in Norfolk, chiefly at Westacre, where nineteen were observed together in 1819; one also was met with near Burnham, and another at Icklingham; several used to be known to breed near Thetford, and it occurred there so late as 1832; one, a female, was shot at Congham in the autumn of 1831, near which place one was formerly obtained also; one near Winterton, and one, a male, near Norwich; as many as eleven have been formerly seen together near Gayton; three females had nests and eggs at Great Massingham, in the spring of 1832; a small flock of females was seen for some years in that county, the last of which was shot at Lexham, near Swaffham, towards the end of the year 1838; one had a nest at Eldon, and her two eggs being taken and placed under a hen, produced two male birds; another, also a female, was shot at Dersingham, near Lynn, early in the year 1838. In Berkshire they used to be met with on Lambourne Downs, up to 1802. In Oxfordshire, one, a female, was shot by Mr. Aldworth, a farmer, at Garsington, in November, 1835; another was said to have been killed on Denton Common in December, 1830.

In Yorkshire these great birds were formerly met with, and used to breed on the East-Riding Wolds; Henry Woodall, Esq., of North Dalton, has informed me that in the year 1816 or 1817 James Dowker, Esq., of that place, killed two near there with a right and left shot, and saw a third I believe at the same time; a nest that had been forsaken was also found, with one egg in it, which is now in the Scarborough Museum; one of the birds shot was presented to His Majesty King George the Third, through the late Dr. Blomberg; eight were seen together in one field about the same date: E. H. Hebden, Esq., of Scarborough, has also informed me of his having seen five Bustards on Flixton Wold about the year 1811, and they remained there at least two years, when two of them were shot; the other three still continued there for another year or more, when two of them disappeared, leaving the solitary bird, which after a length of time was shot near Hunmanby by the gamekeeper of Sir William Strickland, and found a few days afterwards by the huntsman of the Scarborough Harriers; one was also shot near Malton, the Wolds near which town they used to frequent; one was shot near Righton.

In an old History of Northamptonshire it is mentioned

that the Great Bustard was at one time common in that county; so it doubtless was on the Lincolnshire Wolds, but it is now extinct as an inhabitant. Dr. Plomley records in the 'Zoologist,' page 2700, the occurrence of one, a female, at Lydd, on Romney Marsh, Kent, January 4th., 1850, and the species would appear, he says, to have been not uncommon there formerly. In Devonshire one is recorded by John Gatcombe, Esq., in 'The Naturalist,' vol. ii, page 33, as having been shot on December 31st., 1851, at Millaton Bridestowe. In Cornwall one was met with the beginning of 1843, on the open moor country between Helston and the Lizard Point; it was a female.

In Scotland it was formerly met with, but Sir Robert Sibbald mentions it as being rare in his day; one was shot in Morayshire in 1803, by W. Young, Esq., of Boroughead.

In Ireland it was enumerated by Smith in 1749 as one of the birds of the county of Cork, but it has long since become extinct there, as well as now in this part of the kingdom. If some feathered 'Rip Van Winkle' of the 'good old times' could revisit the scenes he frequented in the 'days that are gone,' he would so little recognise them as the same, that he would not wonder that none of his kind were still to be found in haunts now rendered so unsuitable to them.

The Bustard has been domesticated, but is said to continue fierce towards strangers, and not to breed in confinement. It is naturally a wild bird, and frequents in winter open barren places, from whence it is only compelled by stress of severe weather, when the snow is deep, to approach nearer to country villages; in the summer, however, the nest being placed in cultivated places, where the young are brought up, they and the dams find their living among corn. The males are polygamous, and leave the females as soon as the task of incubation commences, both then living separate for a few weeks. The young families unite together in the autumn, and in winter congregate still more, forming flocks of from four or five to about forty or fifty, or even, it is said, a couple of hundreds; in the spring they again separate. These birds are very fine eating, the young especially, at about a year old. In the spring the males, in small parties of three or four, strut about, with drooped wings and spread set-up tails, shewing themselves off to excite admiration.

In flight their wings are moved slowly, but if suddenly disturbed it would appear that they rise suddenly to a height

of forty or fifty feet, and then, after a few rapid strokes, sail away. When flushed they perform flights of two miles or more without difficulty, at a height of about a hundred yards, and their migrations testify that they are capable of much more extended peregrinations. They do not run to escape danger. The wings are not closed immediately on alighting.

Graminivorous birds, they feed on grasses, clover, turnip tops, and various vegetables, corn, barley, both the ears and leaves, and other grain, and beetles; Rennie adds worms, frogs, mice, and young birds to the catalogue: small stones are swallowed to grind up the food. The young are fed with insects.

The bare earth is laid upon. 'It is said that the Great Bustard will forsake her nest, if only once driven from it by apprehension of danger; but when the eggs are laid, and still more when the young are produced, it is only repeated meddling with them that will induce the parents to forsake them.'

The eggs, two in number, are of an olive brown colour, blotted with pale ferruginous and ash-coloured spots.

Male; weight, as much as twenty-eight or thirty pounds; length, three feet nine inches; bill, brown; iris, reddish brown. Head on the centre of the crown, chesnut, variegated with black, on the sides, white; neck on the back, light greyish, on the sides, white; about the shoulders a soft grey down takes the place of feathers; nape, pale chesnut, barred with black; chin, white; underneath it a plume of narrow feathers about seven inches long falls backward, partly covering a strip of bluish grey skin on the front and sides of the neck; throat above, white, below, pale chesnut orange, as is the upper part of the breast, which then below is white; the feathers have a pink tinge at the base; back, pale chesnut orange, barred and variegated with black; the base of these feathers also is of a delicate rose tint.

The wings have the first quill feather shorter than the second, the second shorter than the third and fourth, which are the longest in the wing; they extend to as much, in the fullest-sized birds, as seven feet three inches; greater and lesser wing coverts, partly white and partly chesnut brown, barred with black; primaries, brownish black, the shafts white; secondaries, greyish white; tertiaries, chesnut brown, barred with black. The tail, rounded at the end, and of twenty feathers, is white at the base, then pale chesnut, tipped with white and barred with black, the two outer feathers greyish white, almost pure white at the base, with two or three small bars of black, near

which they are tinted with reddish orange; underneath it is barred with dusky grey; upper tail coverts, pale chesnut, barred with black; under tail coverts, white. The legs, covered with round scales, toes, and claws, blackish, the latter three in number.

Female; length, three feet; the head and neck are of a deeper grey, nape, reddish orange; the chin is without the plume until the bird is of mature age—three or four years old, and then it is said to appear, but less developed than in the male.

The young at first are covered with buff-coloured down, barred on the back, wings, and sides with black.

The plate is from a beautiful drawing obligingly made for this work by John Gatcombe, Esq., of Plymouth.

LITTLE BUSTARD.

LESSER BUSTARD.

Otis tetrax, PENNANT. MONTAGU.

Otis—A Bustard. *Tetrax*—.....?

THE great deserts of Tartary are among the principal strongholds of these birds, and there vast nomade tribes of them are to be seen, wandering thence in various directions to the district of the Caucasus, and especially towards the Caspian Sea, the south and south-west of Russia, and the south of Siberia, Turkey, and Greece, and some are found also in Italy, Sardinia, and Spain. They likewise are natives of the north of Africa, and of Asia.

A good many instances of the occurrence of this bird have been recorded, all of them in the winter half of the year. In Yorkshire one was shot January 14th., 1854, at Goodmanham, near Market Weighton, by the Rev. W. Blow; another, formerly, on the Wolds, and one at Boythorpe, also in the East Riding, early in 1839; one near Beverley; and in the winter of 1814-15 two were seen near Flamborough, one of which was killed. In Northumberland two, one near Warkworth in the autumn of 1821, and the other near Twizell the 1st. of February, 1823. In Hampshire one at Heron Court, near Christchurch, the seat of Lord Malmesbury. In Essex one at Harwich in January, 1823, one at Little Clacton in the winter of 1824, and one several years since at Writtle, near Chelmsford. In Norfolk several have occurred, one, as Mr. Robert Drane informs me, between Yarmouth and Winterton, about the 30th. of December, 1853; it was imagined to be 'some sort of Cochin-China Guinea-fowl;' also others in Cambridgeshire and Suffolk. One was shot, as William

LITTLE BUSTARD.

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Hewet, Esq., of Reading, has obligingly informed me, in 1849 on Mr. Deane's farm (English) in Oxfordshire; one was also shot on Denton Common in December, 1833; one at Boshan, near Chichester, Sussex, in 1852, of which A. Fuller, Esq. has written me word; and two near Birmingham, Warwickshire, in October, 1839. In Cornwall, some half a dozen specimens have occurred—one in December, 1853. In Kent one, at Chatham, in January, 1834. Others in Devonshire.

In Scotland one is related to have been obtained near Montrose in December, 1833, the only 'Legend of Montrose' or of Scotland respecting the species in that part of the island.

In Ireland the late William Thompson, Esq., of Belfast, mentions that two were seen in the county of Wicklow on the 23rd. of August, 1833, and that one of them was shot.

They inhabit champaign countries, both waste and cultivated, and are fine birds to eat. The male is polygamous.

They fly, if suddenly alarmed, with great speed and power for a distance of fifty or a hundred yards, raised but a little above the surface of the ground, and on alighting, are said to run with swiftness. If several are in company they are very wary.

They feed on grain, grasses, and various vegetables, dandelions, clover, turnips, and other sorts, as also on insects.

Meyer likens the note to the syllable 'proot,' and says that it is most heard at night, and that the young chirp like chickens.

The nest is on the ground—a mere hollow, under the shelter of any sufficiently high herbage that may be proximate.

The eggs are said to be from three to five in number, olive brown in colour, sometimes varied with patches of a darker shade of brown.

Male; weight, twenty-five ounces; length, about one foot five inches; bill, brown; iris, golden yellow; behind it is a bare space. Head on the crown, pale chesnut, mottled with black; on the sides, bluish grey, neck in front, and on the sides, bluish grey, bounded below with a border of black passing to the back of the neck; that is succeeded by a narrow white ring, and this again by a broad band of black; beneath this is a gorget of white, followed by another of black. In winter the neck is pale chesnut, marked with black. Breast, white, the down at the base of the feathers pale rose-colour. Back, pale chesnut, streaked irregularly with numerous narrow lines of black.

The wings, which do not reach to the end of the tail, have the first quill feather about an inch shorter than the second, which is as long as the third, and both longer than the fourth, and the longest in the wing. Greater and lesser wing coverts, white; primaries, white at the base, the remainder greyish black; secondaries, patched with black and white; tertiaries, pale chesnut brown, streaked irregularly with numerous narrow lines of black. The tail is of eighteen feathers, white at the base, and barred with two narrow black bars, the ends mottled with black and buff white, the tips white; upper tail coverts, pale chesnut, streaked irregularly with numerous narrow lines of black. Legs, toes, and claws, brown.

Female; head, crown, and neck, pale chesnut, mottled and streaked with black; chin, white; breast, marked with short bars of black; greater and lesser wing coverts, partly white.

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MACQUEEN'S BUSTARD.

MACQUEEN'S BUSTARD.

RUFFED BUSTARD.

Otis macqueenii, GRAY.

Otis—A Bustard. *Macqueenii*—Of Macqueen.

THIS species has been confounded with the Houbara or Ruffed Bustard, but the length of the wings, which in the present one reach quite to the end of the tail, at once distinguishes them.

The only British, or, I believe, European specimen of this Bustard at present on record, was shot at Kirton in Lindsay, Lincolnshire, on the 7th. of October, 1847, by Mr. George Hansley; it is now in the Rudston Read collection of British Birds in the York Museum, where I have seen it. A very excellent likeness, with an account of it, is given in 'The Naturalist,' vol. ii., page 89, by my brother, Beverley R. Morris, Esq.

Macqueen's Bustard is so very closely allied to the Houbara, that I should suppose that both are to be found in the same districts. The latter, as those who have read the second volume of Mr. Layard's deeply interesting 'Nineveh and its Remains' will at once recall to mind, is very plentiful in Arabia and on the wide plains of Messapotamia, where the wandering tribes hunt them with Hawks trained for the purpose. Doubtless they are to be met with likewise in the more northern regions where the renowned Hippomolgians find pasture for the noble animals who are their all. Glorious scenes are those eastern lands, and wonderful as are the monuments of three thousand years antiquity which there bring, as it were, the departed Assyrians again before us to admire their vast and so enduring works, still more striking

and still more ancient in their origin are the natural beauties which spread before the gazer as far as the eye can reach. Those vast plains, the native place of the Bustard, and the very garden of flowers, vie in gorgeous beauty with the richest products of the looms of Cashmere, and leave their famed rivalry far behind. If the small pattern gives but a faint idea of the 'tout ensemble,' size itself being a feature that attracts and pleases, how is it when both the smallest flower that takes its modest place in the great carpet of nature, and the immense bespangled tapestry itself, each, as a part, and as the whole, challenges all competition, and distances every thought of approach; 'Solomon in all his glory was not arrayed like one of these.'

The sun above in unclouded splendour walks through the sky, and flashes below from the cup of every flower and from every blade of grass; the scent of aromatic herbs and sweet-smelling blossoms enrich the undisturbed air; sublime stillness reigns around, and a perfect calm pervades the wide solitude. Nature there provides a succession of colours, such as can probably nowhere else be matched. One day admiration ranges over the level land dight with flowers of a golden yellow, which, almost in a night, give place to new ones of the deepest blue; these are followed by others of a variety of hues, with which the face of the country is carpeted anew. Again, a bright scarlet bedecks the meadow, and is followed by the emerald green of the luxuriant pasture, itself in its turn studded afresh with single gems of varied brilliancy. Once more the plain is enriched with the gayest purple, or bright with burnished gold, and then the greensward is flowered with a gorgeous display of embroidery, whose spangles enamel its bosom with a rare mosaic, such as mortal craftsmen cannot fabricate the likeness of.

Or if you change the scene, and follow the bank of the winding Tigris, at one season the odour of orange blossoms fills the air, and at another clusters of golden fruit hang from the branches; vast groves of Feathered Palms bound the distant horizon; here all is clouded with a purple shadow, and there all glitters with reflected tints in the rays of the setting sun. Then the awful stillness that pervades the vast expanse is broken by the wild cry of some bird of night, or the howl of some roaring beast roused from its lair, and then at last all once more is still. But, glory be to God, morning comes again, and again you move on, and by the shore of some

unexpected inland lake, whose quiet waters throw back the shadows of the neighbouring low hills, and glisten farther off with the beams of the 'Rising Sun,' the snowy Egret, with its graceful crest, the stately Crane, and the 'Pelican of the wilderness,' stand side by side, White Herons watch motionless at the margin, and variegated wildfowl float lazily upon the crystal surface: you stretch off into the desert, and now the Bustard springs up from your feet.———

Much does Mr. Layard's 'Nineveh and Babylon' make one long to follow him in his wanderings in those countries of wonder, as it has led me to wander with him in thought, and at the same time from my subject, to which I must return, and give the description of the bird before us.

It occurs from the Himalaya Mountains to Siberia.

The specimen, Mr. Alfred Roberts informs me, was very wild.

He found that it had fed on caterpillars, beetles, and small snails.

Female; weight, two pounds and a quarter; length, one foot eleven inches; bill, dark lead-colour, compressed at the tip, depressed at the base; iris, yellow. Head and crown, pale rufous, mottled with black; neck on the back, white, minutely mottled with brown; on the sides ornamented with a range of feathers two inches long, about two thirds of the upper portion black, the lower part white; chin, white; throat, pale rufous, mottled with zigzag black bars. The wings extend when closed to the end of the tail; they expand to the width of three feet eight inches; greater and lesser wing coverts, pale rufous, mottled with zigzag black bars; primaries, black; the legs, which are bare of feathers a little above the knee, and toes, greenish yellow.

PRATINCOLE.

COLLARED PRATINCOLE. AUSTRIAN PRATINCOLE.

Glareola torquata,	Meyer.
" *austriaca,*	Latham.
Hirundo marina,	Ray.
" *pratincola,*	Linnæus. Gmelin.

Glareola—.....? *Torquata*—.....?

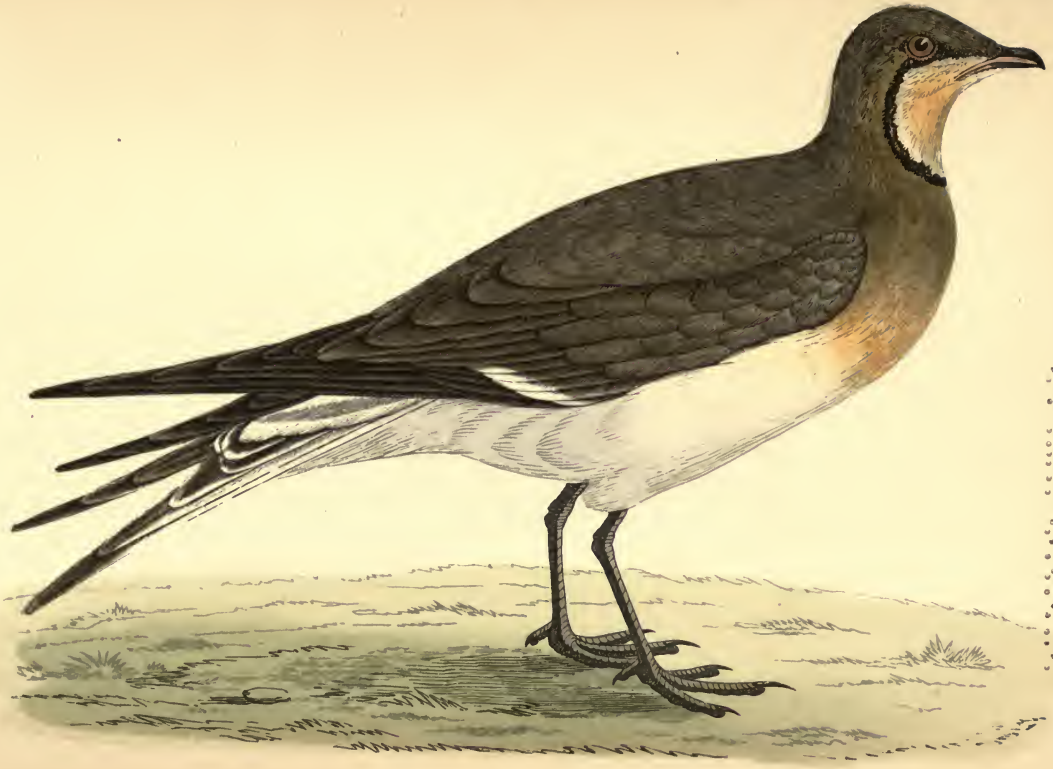
The Pratincole is abundant on the continent of Europe in Hungary, Dalmatia, Turkey, and Sclavonia; and is met with in Germany, France, Switzerland, Sardinia, and Italy. In Asia it is common in Tartary, and in the region between the Black Sea and the Caspian Sea.

In this country, in 'Yorkshire to wit,' one was obtained in May, 1844, on Staxton Wold, near Scarborough, as recorded by W. M. E. Milner, Esq., M. P., in the 'Zoologist,' page 2023. It was at the time in company with a flock of Dotterels. One in Northumberland, at Bedlington, the beginning of February, 1850. In Devonshire two were seen by the Hon. T. L. Powys, and W. W. Butler, Esq., at the mouth of the River Exe, on the 7th. of September, 1851. In Norfolk a pair were shot on the Breydon-wall, in May, 1827. One was killed near Liverpool, on the 18th. of May, 1804.

In Zetland one was shot in Uist, by Mr. M. Bullock, August 16th., 1815.

Sandy places, near water, are its natural haunt, and low meadows, where doubtless its insect food abounds.

They migrate in spring and autumn, moving in large bodies of several companies, and when resting by the way here and there, on a note of alarm from one of the body they all take wing, and after circling about once or twice, go on their way. They are sometimes seen on the sea-shore, when awaiting the



PRATINCOLE

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arrival of part of the flock on their migrations. 'By the beginning of August, the young fly about with the adult birds; the parents being very much attached to their brood, accompany them until the beginning of September, when they one and all think of returning and going southward for the winter.'

They are capable of being easily tamed. In their wild state they are restless, lively, sociable, that is among themselves, for they rarely associate with other species. 'Where they meet with suitable ground, they remain for some time in the neighbourhood, flying away in a body and often returning again in a moment, to the great surprise of the beholder who may happen to have startled them up.' If alarmed when feeding, they strike the tail two or three times against the ground, and soon after take wing.

They fly with extraordinary rapidity, and their evolutions in the air are exceedingly graceful, quick, and beautiful, and they also run very fast. 'When a flight of them passes through the air within sight, they proceed very swiftly, and, on lowering to alight they shoot like arrows by one another; finally they once more open their wings to their full length and highly raised, and then settle, rather closely spread over the ground.'

They take their food on the wing, hawking about after the manner of the Swallows, and also on the ground, from whence they spring into the air to catch their prey. They live on flies, gnats, cockchaffers, and other beetles, grasshoppers, and other insects and worms. The larger sorts they knock against the ground with their bills, to kill, and to dislodge the harder parts.

Meyer says, 'the call-note sounds like the word 'carjah,' 'carjah,' and 'bedræ,' 'bedræ,' very quickly expressed.'

A slight depression in the soil serves for a nest, or it is placed, Selby says, among rushes or other thick herbage. Many nests are often made not far from each other.

The eggs, four in number, are spotted with brown.

Male; length, from about nine inches to ten and a quarter, or even ten and a half or over, according to the age of the bird, the tail being shorter at first; bill, somewhat hooked, short, and broad at the base, black, the sides and the base of the lower mandible, which is shorter than the upper, and received into it, scarlet orange, brightest in spring. The bill is smaller in young birds. Iris, light reddish brown, the eyelids clothed with small white feathers; a black line runs to

and behind it, from the base of the bill. The eye is placed rather far back in the head. Forehead, flat; crown, dark yellowish or reddish brown. The neck, short and full, in front pale reddish white or buff, bounded by a narrow distinct stripe of velvet black, which proceeds upwards as a collar, and joins the black streak between the bill and the eyes; nape, dark yellowish brown, with a greenish metallic lustre; chin and throat, pale reddish white or buff, the former the palest; breast above, pale brownish yellow, on the lower part white; back dark, yellowish brown, with a greenish metallic lustre, on the lower part orange brown.

Wings, very long and narrow, the first feather the longest; greater and lesser wing coverts, dark yellowish brown, with a greenish metallic lustre; primaries, brownish black, the shaft of the first broad and yellowish white; secondaries, paler; tertiaries, dark yellowish brown, with a greenish metallic lustre; greater and lesser under wing coverts, partly brown, and partly bright ferruginous.

The tail, long and much forked, the inner half white, the rest blackish brown, the centre feathers almost wholly black; the white increases on every feather towards the outside. The two outer feathers are nearly two inches and a half longer than the rest, the outer one very slender; upper and under tail coverts, white. Legs, long, bare above the knee, and, as the toes, clear brownish purple red; claws, dusky black, and slightly bent, the middle one long, and somewhat pectinated.

The general texture of the feathers is silky, fine, and close.

The female nearly resembles the male.

The young have the head, crown, neck, and nape brown, with reddish brown edges to the feathers; throat, pale brown, the band only indicated by a few dusky brown spots; breast, clouded with brown and dusky, below a mixture of grey and white.

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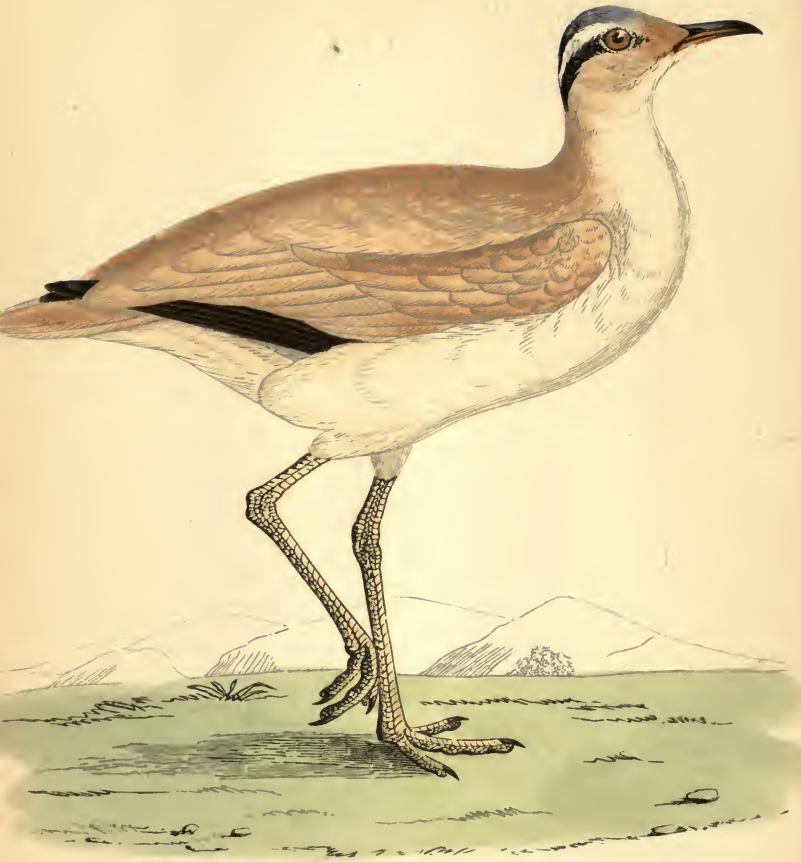

COURSER.

COURSER.

CREAM-COLOURED COURSER. CREAM-COLOURED PLOVER.
CREAM-COLOURED SWIFTFOOT.

Cursorius Europæus, MONTAGU. BEWICK.
" *Isabellinus*, FLEMING. SELBY.

Cursorius. *Curro*—To run. *Europæus*—European.

THIS elegant bird is a native of Africa, and most plentiful, it is said, in Abyssinia. A few specimens have occurred in France, Switzerland, Germany, Spain, and Italy.

One was shot near Wetherby, in the West-Riding of Yorkshire, in April, 1816; a second by the gamekeeper of Lord Harewood in 1825; and a third by the keeper of the Hon. Charles Stourton, of Holme, near Market Weighton, in the East-Riding; one in Charnwood Forest, Leicestershire, on the 15th. of October, 1827. It was the last bird figured by Bewick! In 1793 one was shot in North Wales, by George Kingston, Esq., of Queen's College, Oxford; another was killed near Wingham, Kent, by William Hammond, Esq., of St. Alban's Court.

It appears to be by no means shy.

This species, as denoted by its name, indeed by each of them, 'mutato nomine,' runs with extreme celerity, and also flies with great power.

Male; length, ten inches; bill, pale brown at the base, nearly black at the tip, and arched; iris, pale yellowish grey; over it is a white streak passing to the nape, below it from the eye is a velvet black one, both meeting behind. Forehead and crown, pale buff orange, the hinder part shading into grey, below which is a triangular spot of black, met by the line from each eye; the neck in front, pale reddish buff white;

behind, and the nape, pale brown, tinged with reddish buff; chin, white; throat and breast, pale reddish or buff white, the latter paler on the lower part; back, buff cream-colour with a tinge of orange.

The wings have the first almost as long as the second feather, which is the longest in the wing; greater and lesser wing coverts, buff cream-colour; primaries, brownish black, glossed with purple, as are the outer secondaries; inner secondaries and tertiaries, buff colour. The tail feathers, except the two middle ones, have an angular black spot near the end, but occupying the inner web only on the outer feather, the ends of all nearly white; under tail coverts, nearly white. The legs, which are long, and bare of feathers half an inch above the knee, and the toes, which are short, cream-colour; claws, blackish brown; that of the middle toe is pectinated, and the outer one is united to it by a rather broad membrane, the inner one by a smaller one; the soles and joints grey.

The plumage is soft and close.

The female resembles the male.

The young have the lines over the eye not very distinct; back, clouded with two shades of brown; the primaries edged on the inner web with buff.

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GREAT PLOVER.

GREAT PLOVER.

NORFOLK PLOVER. THICK-KNEED BUSTARD.
STONE CURLEW. WHISTLING PLOVER. STONE PLOVER.
THICK-KNEE. COMMON THICK-KNEE.

Œdicnemus crepitans,	Selby. Jenyns.
" *Bellonii*,	Fleming.
Charadrius crepitans,	Montagu. Bewick.
" *œdicnemus*,	Linnæus. Gmelin.
Otis œdicnemus,	Pennant. Latham.

Œdicnemus. *Oideo*—To swell. *Knemè*—The leg or thigh.
Crepitans—Crackling.

In Europe this species is plentiful in Turkey, part of Siberia, Germany, France, Spain, Greece, and Italy, uncommon in Switzerland and Holland, and from thence it extends in its range, by Sardinia and other islands of the Mediterranean, to the north of Africa, and thence again to the south of that great continent, even to the Cape; it likewise occurs in Abyssinia, Nubia, and Egypt. In Asia it is found in Asia Minor, and on the plains between the Black Sea and the Caspian Sea, also in Arabia, Persia, the East Indies, and Syria.

It is most abundant on the eastern side of our island, particularly, as imported by one of its names, in the county of Norfolk. In Yorkshire it breeds about Rossington, and other places near Doncaster; also near Scarborough. It used to do so regularly on the wolds, but never abundantly in more recent times. In Cornwall it is rare, but has occurred near Gwyllyn Vase; one also in the parish of St. Levan, near the Land's End; others in Devonshire and Lancashire. In Bedfordshire one was met with on March 29th., 1851. In Oxfordshire it has been known near Henley-on-Thames; also in Dorsetshire.

In Ireland one was procured in the county of Waterford, and one in the county of Wexford, which was shot near Growtown, by Travers Hawkshaw, Esq., of Hilburn House.

The Thick-knee haunts wide open spaces, commons, warrens, heaths, sandy flats, such as chiefly border upon the sea coast, uncultivated wastes, and sheep-walks, seeming to prefer districts where the soil is poor, and in default of these, the larger fields, fallows, and turnip grounds.

This fine bird I have repeatedly seen on the top of the barren hill between Lyme Regis and Charmouth, Dorsetshire. Many a 'stalk,' when a boy, have I had after him, but he always managed to out-general me by keeping his sentry-box in the middle of the open field, or resorting to that vantage-ground on the least symptom of danger.

The Rev. R. P. Alington tells me that it used to be common near Swinhope, in Lincolnshire, as it was in other parts of that county, but that it has become much more rare from the enclosing of the country. A nest was taken in 1852, in Kingly Vale, near Chichester, Sussex, as I am informed by Mr. George Jackson, of that place. It is not uncommon in that county, as also in Hampshire, about Selborne; Kent, Essex, Suffolk, Worcestershire, and Cambridgeshire,—in the last-named only occasionally. The Rev. Dr. Thackeray obtained a young one bred near Cambridge. In some parts of Surrey they are not uncommon.

One was obtained close to the town of Cambridge, in October, 1853, as Thomas George Bonney, Esq., of St. John's College, informs me. Several have been obtained in the winter months in the Land's End district, in Cornwall, one in the beginning of February near Falmouth, and one at the Land's End, in January, 1848; one near Penzance, about the 24th. of December, 1844. In Leicestershire, James Harley, Esq., of Leicester, writes me word that it is a regular summer visitant, but only very locally distributed, namely, on the north-east side of the county, abutting on Lincolnshire.

Birds of passage, they arrive here in March and April, or the beginning of May; and depart again usually by the end of September or October, in flocks of as many as forty or fifty, but some few continue longer. They repair to the same spot annually: they migrate by night. One was shot the first week in February, 1852, as Mr. F. W. Stears has informed me, at Roos, in Holderness; and in the same month, in 1807, one was killed in Devonshire, as recorded by Montagu; the

Rev. Gilbert White, too, records that in 1788, he heard one on the 27th. of February. One was shot near Thetford, in Norfolk, the 9th. of December, 1834, by Mr. J. D. Salmon; and another at Ludham, on the 15th. of December, 1846.

In general they are seen singly, or at the most in pairs, in spring. They migrate in the autumn in the small numbers of the respective families. They repair to water every evening to drink and to wash themselves. They are easily tamed, and kept in gardens, and seem to become attached to their keepers, and are said to live to a great age: naturally they are very wild and shy.

William Hewet, Esq., of Reading, has sent me several particulars of these birds. The young, even when fledged, will squat, and allow themselves to be picked up. If disturbed from the nest, the parent runs off very swiftly with the head stooped. The young ones are very good eating, but the old birds are dry and tough.

They fly swiftly on occasion, and with much power, but low, though often at a considerable height during the night; they also run extremely fast. The legs are held out behind in flight. In the day-time they generally lie at rest near some stone, clod, or other sheltering projection, or stand on one leg with the head buried in the feathers.

They feed on beetles and other insects, worms and slugs, and swallow pieces of stone to aid digestion.

Their cry may be heard sometimes through a summer's night from the fallow fields, and there is something peculiarly striking in their wild wail; so at least I used to deem it: 'Sweet was the music to my ear' in the 'joyous days of old.' Buffon renders it by the word 'turrlui,' and Meyer by 'dit,' 'dillit,' and 'kræeet,' which latter it utters chiefly during the evening and night when on the wing, and but rarely in the day. It is also rendered by the syllables 'cur-lew,' whence one of its vernacular names; the other I suppose, being derived from its frequenting stony places.

The bare earth is the nest, among weather-worn stones. The male appears to sit as well as the female, the time of incubation being sixteen or seventeen days. The young are led about by the female almost as soon as hatched, that is to say, on the day following their birth; at first the old birds take great care of them.

The eggs are pale brown, blotted, spotted, and streaked with greyish blue and dark brown, assimilating closely in appearance

to the grey flints that surround them, thus being very difficult to detect. They are generally two in number, but sometimes, it is said, three; the third being for the most part not hatched. They vary in size and colour, some being a dull yellow, and the spots much less clearly defined than in others.

Male; weight, about seventeen ounces; length, one foot five or six inches; bill, dusky black at the point, the rest greenish yellow; from the base of the upper mandible a light-coloured streak passes backward under the eye, and from the base of the lower one a brown one underneath. Iris, large and prominent, golden yellow—a dark line encircles it; behind it is a small space bare of feathers of a yellowish green, mostly concealed by the ear coverts. Head, large and thick, on the sides white; on the crown, neck on the back, and nape, pale tawny brown, each feather with a streak of black in the centre; the neck in front, pale brownish white, each feather streaked along the centre with blackish brown. Chin and throat, white; breast, nearly white, but yellowish, the feathers streaked with blackish brown. Back, pale tawny brown, each feather with a blackish brown longitudinal streak.

The wings have the first and second quills nearly equal in length, and the longest in the wing; greater and lesser wing coverts, pale tawny brown, each feather with a brownish black line along the shaft; primaries and secondaries, nearly black, the first and second with a broad white patch towards the end across each web, the former the larger—the seventh and eighth slightly tipped with white; tertiaries, pale brown, each feather with a brownish black line by the shaft. The tail, of twelve feathers and wedge-shaped, is on the inner half mottled with two shades of brown, the third part reddish white, with bent bars, and the end black; the outside feathers shorter than the middle ones, which are not tipped with black. The three outermost feathers the lightest coloured, and the bars darker. Upper tail coverts, pale brown, with a dark mark by the shaft of each feather; under tail coverts, buff white. The legs, which are long, and toes, yellow, with a greyish tinge—the outer toe is connected with the middle one as far as the first joint by a membrane; claws, nearly black.

The female resembles the male bird. The legs thick below the knee joint.

The young are at first covered with a variegated grey down, which gradually gives way to the proper plumage.

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GOLDEN PLOVER.

GOLDEN PLOVER.

WHISTLING PLOVER. YELLOW PLOVER. GREEN PLOVER.

Charadrius pluvialis, PENNANT. MONTAGU.
" *Africanus*, LINNÆUS.

Charadrius.....? *Pluvialis*—Rainy, pertaining to rain.

THE name of the Plover is derived from the French 'Pluvier,' as that again is from the Latin, as assigned as the specific designation of the bird before us.

It occurs in Europe in Russia, Sweden, Lapland, Norway, Holland, France, Germany, and Sardinia; and visits in summer the Ferroe Islands, Iceland, and Greenland; and towards winter, France, Italy, and Sardinia, and North Africa. It also frequents the regions between the Black Sea and the Caspian Sea.

In Yorkshire, they are plentiful in the parish of Nafferton, and all over the wolds; are common also about Sheffield, and the moors about Meltham, where they breed; also on the moors near Barnsley, are occasionally met with on Whin Moor, near Leeds, and in the neighbourhood of Halifax they breed sparingly on the high moors, and are met at Hambleton, and at times in small numbers on the sea-shore in winter. In Cambridgeshire they are common in the fens. In Cornwall also, Gwyllyn Vase, Swanpool, and in other parts. They breed on Dartmoor, Devonshire, as James Dalton, Esq., of Worcester College, Oxford, has informed me.

In Scotland, they are exceedingly abundant, especially, as might be supposed, in Sutherlandshire, and there about Lairg, Durness, Tongue, and Scourie; also in Forfarshire, and on the Cheviot Hills, and in other suitable situations. In the Hebrides they are likewise vastly abundant, and are plentiful in Shetland and Orkney, where they appear in flocks of thousands. A great

number leave in spring, yet a good many remain during summer to breed.

In Ireland they are likewise common.

Golden Plovers associate in the autumn in flocks of very large extent, and are then found on moors, downs, and heaths, and in any large fields, dispersing again early in spring, generally in February, but some are seen in April, retiring to breed in May. They have been noticed, however, in Norfolk so late as the 25th. of that month. They arrive in large numbers in November, and even in August and September, some beginning to flock together in the former month. Thus, though indigenous here, they are in some degree migratory. Their movements for the most part take place in the night. They breed in bogs and undrained hills, and are then hardly ever seen except in pairs; at other times of the year they chiefly frequent open fields, heaths, moors, and downs, and in severe weather resort to the sea-coast.

The old birds display the customary anxiety in endeavouring to protect their brood; practising every device to allure away the enemy—tumbling over as if unable to fly, or feigning lameness. The female also sits long on the nest, and if she leaves it, takes the precaution of running off to some distance before taking wing. They are exceedingly good eating, and are sold in numbers for the table, many being often killed at a single shot as they wheel by—two or three, five or six, or even as many as fourteen, as has been known, W. Hewet, Esq. tells me. They are capable of being kept in confinement. They roost on the ground under the shelter of some tuft during the depth of the night, or in the middle of the day.

In their flight, which is very swift and strong, they often sweep down close to the ground, and then suddenly rise up in the air, turning and twisting continually round and round before settling. During the day-time, as they feed at night, they either sit on the ground, for the most part, or stand in a state of repose, with the head drawn down between the shoulders. They run with great velocity, now and then stepping on to any elevation to look about.

They feed on insects of various kinds, caterpillars, worms, and slugs; wheat in the green state, running up and down the furrows to pick it up, or other vegetables and small berries.

The wild whistle of the Plover, a wailing note, is exceedingly pleasant to those who have a relish for country sounds, and

who find an additional piquancy in those that are more wild. He that can say 'My mind to me a kingdom is,' is in no danger of being made melancholy by any sound in nature. In the evening and at night, you may hear it. It has at times a ventriloquistic power, and is very deceptive. A skilful imitation of their cry will decoy them to you. In the spring season a more varied note is used, during which the bird flies at a great elevation, and continues soaring about for a considerable time. Meyer likens the note to the words 'tluwee, tluwee,' uttered at a high pitch, and considerably loud.

Nidification commences about the end of May, or beginning of June. The hen bird alone sits. Incubation lasts seventeen days.

The nest, which I have never seen 'in situ,' is a very inartificial structure, being merely a few stems of grass and fibres laid together in some small hollow of the ground, only just large enough to contain them; what there is, is made the end of May or beginning of June.

The eggs, four in number usually, are of a yellowish stone-colour, blotted and spotted with brownish black. They are placed quatrefoil—with the small ends pointed together inwards.

The young 'quit the nest as soon as hatched, and follow their parents till able to fly and support themselves, which is in the course of a month or five weeks.'

Male; weight, between seven and eight ounces; length, from ten and a half to eleven inches and a half; bill, black; iris, dark brown, nearly black—the space between it and the eye, deep black—over it white. On the forehead is a band of nearly pure white in summer, which in winter is yellowish white, streaked and spotted with pale brown and grey. Head on the sides, greyish brown; on the crown, neck on the back, and nape, greyish or brownish black, with purple reflections of a paler shade, and large yellow angular spots on the whole edge and tip of each feather. Chin, neck on the sides, throat, and breast, deep velvet black, in the form of a list, in summer, with a band of white varying to yellow, and marbled with black and pale brown on the sides and below the wing, the feathers at the corner of which are also white below; in winter the chin and throat are whitish; the breast, dusky greyish white, tinged with dull yellow, and spotted and streaked with darker grey. Before and after the breeding-season the black and white plumages intermix. A bird has been seen

in full summer plumage on the 22nd. of February. It is to be noticed that some new black feathers are produced, while others are changed by the black pigment from white to black; the process being to be observed in all its gradations. Back, deep blackish or greyish brown, darkest in summer, with the yellow marks on the feathers.

The wings have the first feather the longest, the axillary plume white in winter; greater and lesser wing coverts, greyish black, with paler yellow angular spots at the edge of the feathers, and in winter the greater coverts are tipped with white; primaries and secondaries, dusky brown, the shafts of the first five white on the anterior part; tertiaries, long, greyish black, with angular-shaped yellow edges and tips to the feathers. Tail, deep brown, paler towards the outside, barred obliquely with yellow or greyish white and brownish black, nearly meeting at the shaft; upper tail coverts, greyish black, the feathers with angular yellow spots on their edges, sometimes crossing them as bars; under tail coverts, white, the side ones shaded with pale yellow, and obliquely barred with brown. Legs and toes, black, deep grey in winter.

In the female the black is not so intense, and is partially mixed with white, but she on the whole resembles the male. Bill, black; throat, greyish white; under tail coverts, greyish white; legs and toes, dark grey.

The young are at first covered with a beautiful party-coloured down, of bright yellow and brown. They quit the nest as soon as hatched.

The young the first year have the breast generally darker than the old birds.

'The intermediate states of plumage in which they are met with in autumn are often very beautiful, the under parts being marbled with black, white, and pale king's yellow, which blend softly together.'—Sir William Jardine.

The full summer plumage is assumed by the end of May.

DOTTEREL.

DOTTRELL. DOTTEREL PLOVER.

Charadrius morinellus,	Pennant. Montagu.
" *Tataricus,*	Latham.
" *Sibiricus,*	Gmelin.

Charadrius.....? *Morinellus*—A diminutive of *Morio*—A fool or dotard.

This species belongs to Europe, being found in Turkey, Russia, Siberia, Lapland, Finland, Norway, Sweden, and Denmark; likewise in France, Italy, Spain, Greece, and its islands; Bohemia and Silesia; and in Holland, where it is rare. It also appertains to Northern Asia, Persia, and Tartary, on the vast Steppes of which country it is found in the vicinity of the salt lakes and marshes of the desolate regions that there exist.

The Dotterel has acquired the character of being a foolish bird, and hence its English name from the word to dote, to be fond or foolish, and its Latin one from the word Morio, a foolish fellow. The only folly, however, that, so far as I can see, the bird is guilty of, is that of permitting the near approach of man, and this on the ungracious principle of believing every one to be a rogue until you know him to be honest, is certainly the opposite of worldly wisdom. For myself, nevertheless, much as I have suffered more than once from acting on the contrary supposition, I still prefer a more unsophisticated maxim.

The bird was formerly supposed to imitate the actions of the fowler, and so to fall into the trap, instead of providing for its escape by a timely flight. Thus, Drayton, in his Polyolbion—

> 'The Dotterel, which we think a very dainty dish,
> Whose taking makes such sport as no man more can wish,

> For on you creep, or cower, or lie, or stoop, or go,
> So, marking you with care, the apish bird doth do;
> And acting every thing, doth never mark the net.'

Montagu observes, that when disturbed, it frequently raises one wing up, which may perhaps have given rise to the popular notion.

In Yorkshire these neat birds were formerly common on the Wolds, as testified, 'exempli gratiâ,' by the house called the 'Dotterel Inn,' erected, as Henry Eustatius Strickland, Esq., of Apperley Court, near Tewkesbury, has informed me, by one of the family, and the sign painted by Mrs. Strickland.

In my parish of Nafferton, a few are annually met with on their passage to and fro; I have one of a pair which were shot within a few hundred yards of the Vicarage, by Mr. John Dickson, of this place, and by him presented to me; and another, one of three killed at a shot, by a farm servant of his, on the wold, above the village, in May, 1852. They remain two or three weeks, resorting to the fallows and open districts; very few, however, now come, compared with those that used to visit these parts. They are occasionally met with on the moors about Halifax, in spring and early summer, and sometimes come to breed on the Marsden and Slaithwaite Moors, are also rare near Sheffield, and very rare near Leeds, as is not to be wondered at. One was shot at Staincross, near Barnsley, in 1830. They are also met with in Derbyshire, Wiltshire, Berkshire, Hertfordshire, Lancashire, Suffolk, and on the Mendip Hills, in Somersetshire, where they are said to breed; and the Downs in Wiltshire. About Swinhope, says the Rev. R. P. Alington, Dotterels are local, arriving half-yearly at particular spots, during their migration to breed. One locality is at North Summer Coats, not far from the wintry railway station of 'Great Coats,' on the estate of Henry Alington Pye, Esq. In Dorsetshire, on Portland and near Weymouth, John Garland, Esq. has informed me that a few annually occur. In Norfolk it is rather rare. One, a male, was killed near Wisbeach, Cambridgeshire, the 9th. of May, 1850, by flying against the telegraph wires on the Eastern Counties Railway; a female was shot on the following day on Guyhirn Wash, and a pair on Bottisham Fen in May, 1851; others have been met with near Cambridge and Royston. In Cornwall it is rare, but has occurred at Bar Point, Gwyllyn Vase, and other places.

They are found in the lake neighbourhood, in Westmoreland and Cumberland, on Robinson Fell, Great Gavel, Whiteside, Helvellyn, Whatson Dod, Great Dod, Saddleback, and Skiddaw; also in Northumberland. In Devonshire they are very rare. A pair were shot on the moor near Seaton Carew, in the county of Durham, May the 10th., 1853; and they have been met with at Scremerston and Unthank, near Berwick.

In Scotland they occur and breed about Braemar, in Aberdeenshire; also on the Grampian Hills, and in the county of Elgin, Dumfriesshire, and other parts.

In Ireland they are rare.

In Orkney they make their appearance in September and October, and again in spring for still more northern regions. A pair bred in Hoy, in 1850. A large flock appeared in South Ronaldshay, in May, 1830.

They frequent open and exposed situations, heaths, barren pastures, sheep walks, new-sown fields, and fallow grounds, on their route to the lonely tops of the mountains on which they breed, and where for the time they dwell among the mists and clouds which so often envelope those lofty districts.

The Dotterel being only a cursory visitant, migrates to its breeding grounds in spring, staying in places on the way, from March until so late sometimes as the 20th. of May, or even it is said the beginning of June, but generally the latter end of April, and returning again the end of August, or beginning of September; some are even later, staying till October or November, but they are probably late hatched broods, or birds that are on their way back from a further distance north. They move forward in promiscuous bodies, without any particular order. They halt at various stations on the way, both going and coming, in Cambridgeshire and other counties, but it may be that they do not stay in each so long as is supposed, fresh arrivals not being distinguished as such, way having been made for them by others, which had preceded them and have moved on.

Many of these birds are shot for the sake of the wing feathers, which are in considerable request for making artificial flies. The birds themselves also are very fine eating. They associate in small numbers, living very amicably together, usually to the number of ten or twelve, sometimes more, but in general the members of the family—only five or six in all. They are often to be seen sitting on the ground in their summer haunts, and, though usually so devoid of shyness,

display the natural anxiety of other birds for their young. They are said to be fond of bathing, and to resort to water early in the morning, or late in the evening for that purpose, and to drink. They are also reported to be fond of dusting themselves. They soon become tame in confinement, but do not live long.

They both fly and run fast.

They feed on caterpillars, worms, slugs, grasshoppers, beetles, and other insects, and also on some leaves of plants.

The note is soft and low, but somewhat shrill. Meyer compares it to the words, 'durr,' 'dutt,' and 'drew.'

Any small hollow in the ground serves for a nest, and it is generally near some stone or rock; a few lichens make its 'mossy bed.' The male assists the female in the work of incubation, which lasts apparently for eighteen or twenty days. The hen bird sits very close, and if disturbed only runs a few yards off.

The eggs are three in number, seldom more. They are laid from the end of May and the beginning of June, to the end of June and even the beginning of July.

Male; weight, about four ounces, sometimes five, and Mr. Yarrell mentions one six ounces and a half; length, nine inches and a half; bill, nearly black; iris, brown; from it, and a little in front, the dark brown of the head descends, and runs down the side of the neck, ending in a point and meeting again the dark brown of the head and back of the neck; a band of white proceeds from the eye on each side, the two meeting below the occiput. Forehead, in winter, white streaked with brown; head on the sides, white; crown, neck on the back, and nape, dark brown, each feather finely margined with white in summer, and in winter with pale reddish brown; chin and throat, white; breast above, grey with yellowish edges to the feathers in winter, succeeded by a band of white, which is edged above and below with a dark line, then lower down, rich orange chesnut brown, still lower black, and finally cream-colour; the black is not so distinct in winter, and the fine orange brown wanting. Back, greyish brown; the feathers margined with pale buff orange.

The wings have the first quill feather the longest; greater and lesser wing coverts, greyish brown, edged with buff; primaries, deep brown; the first with a broad white shaft, very thick and strong; secondaries, deep brown with buff edges; tertiaries, greyish brown edged with buff. Greater and lesser

under wing coverts, greyish white. The tail, of twelve feathers, and slightly wedge-shaped, is greyish brown; the centre ones scarcely tipped with dull white, the three outside ones with broader ends of white; legs and toes, dull greenish yellow; claws, dusky black.

In the female the streak over the eye and sides of the head are reddish white, with a few specks and lines of brown; forehead white, streaked with brown; crown, brownish black; the feathers edged with pale reddish brown. Neck and nape, greyish ash-colour, tinged with pale orange brown; chin and throat, reddish white, with a few specks and streaks of brown. The band on the breast is not so distinct, and greyish white; the orange brown much paler, and marbled and tinged with greyish ash-colour; and the lower part mixed with white feathers; back, brown tinged with grey; each feather being deeply edged with pale orange brown. Tail, deep brown; the two middle feathers margined near their tips with reddish white, the rest having large white tips, the outermost feather with its outer web white. Under tail coverts, reddish white.

In the young the bill is black; iris, dark brown; over the eye is a broad band of buff orange; forehead, and sides of the head, yellowish cream-colour, with small spots and streaks of greyish brown; crown and back of the head, neck on the back, and nape, dark brown, all more or less broadly edged with buff orange; neck on the sides, buff orange. Breast, grey, slightly tinged with reddish white, and marked on each side with large spots of olive green; below white, spotted here and there with greyish brown. Greater and lesser wing coverts, olive green, deeply edged with reddish white. Tail, olive green, the feathers margined with white, the centre ones tipped with reddish white, and the three side ones ending in a large irregular whitish spot. Legs, pale olive green; toes, light yellow on the soles.

The plate is from a drawing by the Rev. R. P. Alington.

RINGED DOTTEREL.

RINGED PLOVER. SAND LARK. SAND LAVROCK. DULL-WILLY.

Charadrius hiaticula, PENNANT. MONTAGU.

Charadrius—.....? *Hiaticula*—.....?

THIS is the first we arrive at of our regular 'long shore' birds, and it is to be found on all or nearly all our coasts, as also by the margins of creeks, estuaries, and rivers, and even at times those of inland lakes and ponds.

It occurs in Europe—its range extending from Denmark, Lapland, Sweden, and Norway, Russia and Siberia to Prussia, Holland, France, Germany, and Italy, and so far as Greenland and Iceland to the north, and Malta to the south. Likewise in Asia, in Asia Minor, and in Japan, according to M. Temminck; and in some parts of Africa—Nubia, and the Cape of Good Hope. In America also, both north and south, about Hudson's Bay, and in Virginia, Carolina, Jamaica, and the Brazils, and in the Sandwich Islands; so that it belongs to the four quarters of the globe.

Mr. Allis says, in his 'Catalogue of the Birds of Yorkshire,' read before the British Association, that specimens have been obtained near Halifax and Sheffield. I have repeatedly observed them on the sands south of Burlington. One of these birds was shot near the city of Worcester on the 8th. of March, 1853. In Dorsetshire I have known them pretty plentiful. In Cornwall they are not uncommon. Two were seen on the banks of the Isis near Oxford, in March, 1852.

In Orkney it is an exceedingly common species, and remains throughout the year. During winter they may be seen in flocks varying from a dozen to some hundreds.

RINGED DOTTEREL.

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It is very interesting to watch this pretty little bird chasing nimbly along the sands close to the water's edge, avoiding the waves that may now and then wash higher up than the others, by deviating just as much as, and no more than is necessary from its course. It needs not the warning of the lesson taught by Canute to his courtiers, but follows the guidance of Nature, obedient to ONE, and ONE only, who hath 'placed the sand for the bound of the sea by a perpetual decree that it cannot pass it, and though the waves thereof toss themselves, yet can they not prevail; though they roar, yet can they not pass over it;'—farther than that it turns not aside, instinctively knowing the truth of the Divine law given to the ocean, and which it must obey, 'Hitherto shalt thou come, and no further, and here shall thy proud waves be stayed.' Thus you may see it 'running before the wind,' as so well depicted by my friend, the Rev. R. P. Alington, in the figure from which the plate is taken, its light feathers blown up by the gust sweeping from behind, and hurrying by its side the bubbling foam left by the recoiling wave of the flowing or ebbing tide.

The numbers of these birds in some parts are added to in the spring and autumn by migratory bodies, respectively proceeding north and south, and these partial migrations take place, it is said by night, and at a very high elevation; I have never had opportunity of seeing it.

The Ringed Dotterel will on occasion make use of the same stratagems and manœuvres that so many other kinds do to allure away intruders from the nest or young, uttering a twittering note of alarm and anxiety. 'At first when leaving the nest, they skulk away from it before taking wing, which they are easily enabled to do from their inobtrusive colouring,' 'and if pursued will fly to a little distance, distend all its feathers, and seem to tumble over head and heels repeatedly, till it has enticed its enemy to a distance from its young, and then it flies off.' When disturbed, they course usually in a semicircle over the sea, and, if allowed, return to the same spot or near it. They are good birds to eat, and are caught in nooses accordingly.

They associate at times with other maritime species, though not on terms of very close intimacy. They are very hardy birds, and may easily be kept in confinement. They are fond of bathing, and Meyer says, sometimes saturate themselves so that they cannot easily take wing.

They fly with strength and rapidity, but generally not far unless much alarmed, coming back to the place they had left, as the most productive probably of a supply of food. The flight is performed with moderate flappings of the wings; they also run fast, frequently stopping and glancing round. They move about in a horizontal position, with the head lowered, and the neck shortened, but when running, stretch themselves out more. Before flying, and again before settling, the wings are spread up over the back.

They feed on worms, marine and other aquatic insects and their larvæ, and small crustacea, shrimps, sandhoppers, and other such, and they continue searching for them on moonlight nights until the morning.

The note is a clear wild whistle, and they utter it when disturbed, taking short flights and then alighting and running again. If much alarmed they fly right off, coursing along over the sea.

They begin to pair early in May, but some earlier and others later in the summer.

The nest, so to call it, for there is none but some slight natural hollow amongst small gravel, or on a little hillock of sand, frequently under the shelter of some tall grass, is generally placed on a bank by the beach, just above high-water mark, but occasionally in sandy places farther inland, as much, Sir William Jardine says, as ten, or from that to fifteen or twenty miles: in some instances on the banks that line the coast, or even over them in an adjoining field. Among others, on warrens in Norfolk and Suffolk, near Bechamwell, Elston, and Thetford, occasionally also in the Fens: great numbers appeared in those of Bottisham and Swaffham, in Cambridgeshire, the Rev. Leonard Jenyns has recorded, in the months of June and July, 1824, which was a remarkably wet season.

The eggs are four in number, and of a greenish grey, pale buff, or cream-colour, spotted and streaked with bluish grey and black, or blackish brown. The male and female both sit on them, and appear much attached to each other, as well as very careful of their eggs and young. In the spring the males often fight.

Male; weight, about two ounces; length, seven inches and a half to seven and three quarters; bill, black at the tip, orange yellow towards the base; iris, brown; below it is a wide black band, reaching in front to and over the bill.

Forehead, white; over it a black band, deepest coloured in summer, crosses to the eyes; crown, neck on the back, and nape, greyish brown; chin and throat, white, extending backwards to the nape; breast, white, with a wide collar of intense black across its upper part, deepest in hue in summer; it is about an inch in breadth, and passing round in a narrowed circle, mingles with the colour of the back; back, greyish brown.

The wings have the first feather the longest; greater and lesser wing coverts, greyish brown, the former tipped with white, shewing in flight; primaries, deep brownish black, with some white at their base; the outer end of each shaft, for about an inch, white, and the tips of some of the inner ones; secondaries, brown, tipped with white, forming a bar across, and the basal part of the outer ones white; tertiaries, greyish brown. Greater under wing coverts, greyish brown, with white tips to some of them; lesser under wing coverts, greyish brown. Tail, greyish brown at the base, darkening to greyish black towards the end; the two middle feathers are the longest, and only slightly marked with white at the end; the next four on each side tipped with white, the outer but one has the outer web entirely white; the outer one on each side is wholly white, with the exception of a black spot in the centre of the inner web. Upper tail coverts, greyish brown; under tail coverts, white; legs and toes, orange yellow; claws, black.

The female resembles the male, but has the black bands on the forehead and the upper part of the breast narrower, and not so deep in colour, and her whole plumage duller.

The young have the bill almost entirely black, the under one pale orange yellow; from the base to the eye is a dusky streak; the forehead has no black band over the white one, which is dull white; crown, greyish brown, without the black band, and below the back of the head is a shade of dull black; the collar on the upper part of the breast is pale dusky brown. Chin, throat, and breast, white, with a tinge of yellow, the gorget dull brown; back, greyish brown, each feather edged with yellowish brown. Greater and lesser wing coverts, greyish brown, the feathers edged and tipped with pale yellowish or whitish brown; secondaries and tertiaries, greyish brown, each feather edged with yellowish brown. The tail has the two middle pairs of feathers tipped with yellowish brown;

legs and toes, pale dull yellow. This species is subject to a double moult.

A curious instance of malformation in this species is given in 'The Naturalist,' vol. ii, page 132, by Mr. Clement Jackson, of East Looe, namely, an additional toe springing from the inside of the right leg, attached to the knee as far as the second joint: no other peculiarity existed, and the bird was very fat. An illustration is given with the account.

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LITTLE RINGED DOTTEREL.

LITTLE RINGED DOTTEREL.

LITTLE RING DOTTRELL. LITTLE RINGED PLOVER.

Charadrius minor, JENYNS. GOULD.

Charadrius..... ? *Minor*—Lesser.

ON the continent this bird occurs commonly in various parts —Germany, France, Italy, and Sweden. It has also been found in Asia, in Persia, in Japan, and the Philippine Islands; as also, Meyer says, in Africa, in Nubia and Abyssinia.

But one specimen of this species, taken at Shoreham, in Sussex, had for some time occurred in this country, but as it was a very young bird, it had no doubt been hatched here by a parent bird of the same kind. Its 'little life' was at once cut short in the land of its birth—'O patria dolce; ingrata patria.' Another was subsequently obtained from Scilly, in September, 1851, by J. B. Ellman, Esq., of Lewes. In Yorkshire one, a male, was shot in a ploughed field near Whixley, an inland place in the West-Riding, by Mr. James Styan, on the 30th. of July, 1850.

It occasionally frequents the tide-way of the sea beach, but for the most part gives a preference to sand-banks, and islands in rivers, as also at times sandy places at some little distance from them.

These birds migrate in the spring and autumn, about March, or rather April, and August or September. They travel in small parties of from five to ten, and invariably during the night. They are sociable in their habits, several broods being brought out in the same locality, and they also intermingle with flocks of other birds. They are not shy, and may be approached pretty nearly. They are easily kept in confinement for a certain time, and become very tame and amusing.

They feed on small worms, flies, beetles, and small aquatic and other insects in their various stages, and this chiefly in the mornings and evenings, and part of the night, wading in search of them in the shallows. They roost during the day, either standing by the water side or crouching down.

The note is a plaintive whistle, and they frequently utter it in the spring as they keep flying about. Meyer expresses it by 'dut,' 'dit,' or 'dea.'

The sand is its nest.

The eggs are of a pale yellowish stone-colour, with numerous small spots of bluish ash, reddish brown, and dark brown. The young are hatched in sixteen or seventeen days, and at once begin to run about, hiding themselves instinctively with much cleverness if endangered.

Male; length, not quite seven inches; bill, slender and black; iris, brown; the eyelids, dark yellowish; forehead, white, over it a black patch as far as the eye; crown, back of the head, and neck on the back, greyish brown; nape, white; chin and throat, white, extending from the latter round the nape; breast, white, with a patch of black on its upper part; back, ash-colour or greyish brown.

The wings have the first quill feather the longest, the second nearly as long; greater and lesser wing coverts, greyish brown; primaries and secondaries, dusky brown, edged with white, and the first quill feather with a broad white shaft; tertiaries, greyish brown. Tail, greyish brown at the base, darker towards the end; the five outer feathers white on the ends, each gradually more so; the outer feather on each side white, with a large blackish spot on the inner web; upper tail coverts, greyish brown; under tail coverts, white. Legs and toes, slender, pale yellowish red; claws, black.

The female has the bands of white and black on the forehead narrower and less distinctly defined than in the male. The feathers of the back and wing coverts have buff-coloured margins; legs, pale reddish yellow; the joints grey.

The young are without the decided black markings; the white also is less pure.

KENTISH DOTTEREL.

KENTISH DOTTEREL.

KENTISH PLOVER.

Charadrius	*Cantianus,*	LATHAM. JARDINE.
"	*Alexandrinus,*	HASSELQUIST.
"	*albifrons,*	MEYER.
"	*littoralis,*	BECHSTEIN.

Charadrius..... ? *Cantianus*—Kentish.

DR. LATHAM was the first to describe this bird as a British one.

In Europe it is plentiful in Germany and Holland, and is found in France, Italy, and along the shores of the Mediterranean generally, sometimes also as far north as Sweden. It is likewise an African species, occurring in Egypt and Nubia; and also, it is said, an Asiatic, in Tartary, India, the islands of the Indian Ocean—Java, and others.

Some were killed near Sandwich, in Kent, in 1787 and 1791; several have been more recently procured there, at Pegwell Bay, and on the Plats, and others towards Sandhurst Castle and Deal. It is likewise numerous at Lydd, in Romney Marsh, and occurs also in Sussex, at Selsey, Rye, and Hastings. In Norfolk it is met with but rarely—has occurred near Yarmouth; also in Suffolk. In Cornwall one was captured the 17th. of April, 1852, near Penzance; it was in company with Sanderlings.

These birds arrive in April or May, and depart in August, to return again, 'barring accidents,' the following year.

They frequent the sea-coast, rarely occurring on the banks of rivers. If very high tides compel them, they retire 'pro tempore' into the adjoining fields, or sometimes even farther inland. If danger approaches while the bird is on the nest, the owner immediately runs away from it, so as to deceive, as to its situation, if she can. So also when the young are

hatched, which they are in seventeen days, when they at once begin to run about, the parents become very uneasy, and flutter about an intruder with notes of alarm.

They associate with the Ringed Dotterels, but the flocks keep distinct in flight.

They can run very fast, and do so if approached. They fly also very quickly. 'Before taking flight it opens its wings wide above its back, and generally skims the surface of the water when it does not intend to leave the neighbourhood; on alighting it skims to a short distance, and on touching the ground with its feet it opens its wings again wide, then runs a short space, and looks round before it begins its vocation of feeding.'

Small marine insects, worms, and crustacea, form the staple of their food.

Meyer gives the words 'tirr, tirr,' 'pitt, pitt,' and 'pwee, pwee,' as resemblances of its note.

The nest is placed on the shingle, or rather is actual shingle itself, or fine sand, any slight depression serving as a receptacle for the eggs; a few blades of grass or withered weeds may perchance afford a scanty lining. The eggs are four in number, Mr. Gould, it is said erroneously, says five; they are of a yellowish colour, finely and much marked all over, but chiefly at and about the centre and base, with dark blackish brown. The bird rarely sits on the eggs during the day.

Male; weight, rather over one ounce and a half; length, not quite seven inches; bill, black; from its base, to and beyond the eye, is a black streak; iris, brown; the eyelids white. Forehead, white, extending broadly over the eye and a little beyond it, over the white is a patch of black; head on the sides, white; crown and back of the head, rich reddish or yellowish brown, with a tinge of grey, the former colour prevailing at the edges; neck on the sides, and nape, white; chin and throat, white. Breast, white, excepting a patch of black on each side of its upper part; back, light greyish brown.

The wings have the first feather the longest; the shafts the darkest coloured; greater wing coverts, light greyish brown tipped with white; lesser wing coverts, light greyish brown; primaries, brownish black; the shafts white, and the last with light edges; secondaries, brownish black, tipped with white, and white at the base; tertiaries, light greyish brown; greater and lesser under wing coverts, white. The tail, greyish brown, has the two middle feathers the longest, and dusky

black at the end, the two outer ones on each side white. Selby says that the four centre feathers are brown, and the three outer ones yellowish white. Probably they vary with age. Upper tail coverts, light greyish brown; under tail coverts, white; legs, above the knee, black, below it, and the toes, bluish grey; claws, black.

The female has the head and neck with less of the black, and not so clear in colour.

The young have no black marks over the white of the forehead, nor on the sides of the breast, but their place is indicated by pale brown; the space between the bill and the eye, and the band, yellowish brown; eyebrow, white. Forehead, white; crown, neck on the back, and nape, pale ash-colour or yellowish brown. The breast has the patch light dusky brown, itself white; back and greater and lesser wing coverts, pale ash-coloured brown; legs, toes, and claws, bluish black.

GREY PLOVER.

GREY SANDPIPER.

Squatarola cinerea,	Fleming. Selby. Gould.
Vanellus griseus,	Jenyns.
" *melanogaster,*	Temminck.
Tringa squâtarola,	Pennant. Montagu.

Squatarola—.....? *Cinerea*—Ash-coloured.

This Plover is found in the north and north-east of Russia and Siberia; plentiful in Holland, and also in the Ferroe Islands, Greenland, Iceland, Sweden, Jutland, Holstein; in Pomerania, while shifting its quarters, and then in France, Italy, Spain, Sardinia, and the Grecian Archipelago. It occurs in the corresponding part of North America—in the Fur countries and to the extreme north, and so far south as Pennsylvania. Likewise in Africa—in Egypt; and in Asia, M. Temminck says, in Japan, Sunda, and New Guinea; and Dr. Horsfield, in Java. It is observed, however, that these birds, as also others obtained from the south of Africa, do not put on the characteristic summer dress, so that I can hardly think that they can be of the same species, though doubtless closely allied.

It occurs in England from the north to the south.

In Yorkshire, it is met with in the winter, on the coast, and also inland, occasionally, near Sheffield, Halifax, Barnsley, and other places. A pair were seen by the Messrs. Tuke, on Hambleton, in the month of June, which no doubt had a nest near, for they would not leave the place, though watched for several hours. They are met with on the Wolds in the autumn. In Norfolk they are not uncommon in the same

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season, and in winter, arriving rather later than the Golden Plover, some tarrying till the latter end of May. In Cornwall, near Falmouth, they are rare.

In Scotland it is also met with. The neighbourhood of Perth is one locality; and Sir William Jardine shot a pair on the banks of one of the lochs at Lochmaben, and has seen others frequently on the Solway—a very likely place for such species, as those who remember the achievements of Herries, as chronicled in 'Red-gauntlet,' will be aware.

In Orkney a pair were seen at Ellsness, in September, 1822. One was killed by Mr. Strang, in January 1834, and another on the 27th. of February, 1844. A few pairs are observed almost every winter.

It is found likewise in Ireland in the winter months.

It frequents the low flats of the sea-shore, and is but seldom seen inland, except during migration: the former they leave when the tide comes up, for the adjoining marshy lands.

Some of these birds remain with us throughout the year, but the chief part move southwards for the winter, towards, and at which season, they are seen most usually with us, and northwards for the summer; the former in the months of August, September, October, and November. They migrate during the night, when, Meyer says, they travel 'at a great height in companies, forming two lines, headed by one bird; the lines extending to the right and left.'

They seem to do well in confinement, soon becoming tame and living a long time. They assemble in some places in flocks of several hundreds, but usually in small parties, and are sociable both among themselves and with other species, unanimously keeping together in flight. They are generally very shy, and except when 'caught napping,' or when young, are very difficult to approach; on their first arrival, however, whether it may be that they are fatigued after their long journey, or have not as yet had cause for alarm, they appear not to be so. They are sold in the markets for the table. 'The general appearance of this species is peculiar to itself; it walks about on the ground slowly and with grace, and stops every now and then to pick up its food; it carries its body in a horizontal position, on straight legs, and its head very close to its body, consequently increasing the thick appearance of the head."

They are said to be very good eating, and are sold accordingly in the London and other markets.

They feed morning and evening, and roost during the daytime, either standing or crouching down. Their food consists of marine insects, beetles, caterpillars, and worms, the smaller shell-fish, and the berries of the whortle-berry and the black-berried heath.

The note Meyer likens to the word 'tlewee,' or 'gleewee.'

They fly low, and very quickly, and have a habit of opening the wings before starting, which in summer shews the jet black breast to advantage.

The eggs are dark green, spotted irregularly with different shades of brown; the spots crowded and confluent round the obtuse end.

Male; weight, about seven ounces; length, eleven inches and a half, or over; bill, black; iris, very dark brown; over the eye is a white streak. Forehead, white or grey, in winter white spotted with brown and grey; sides of the head, white, with a few dusky lines; crown and neck on the back, grey, the former less, the latter more, spotted with dusky, the shafts black; nape, brown, black, and white; in the winter all dusky with grey edges and tips to the feathers. Chin, throat, neck in front, and breast, black in summer; the latter white on the sides, but all in winter are spotted with brown and grey, or yellowish white, the latter colours forming angular marks on the feathers; the breast below, white, in winter dull white. The back has the feathers black, widely tipped with greyish white or white; in winter dusky, with grey edges and tips to the feathers.

The wings, about two feet in expanse, have the first quill feather not quite half an inch longer than the second, and the longest in the wing; greater and lesser wing coverts, black, all barred on the tips with white or greyish white; primaries, dusky, the shafts white. Montagu adds, 'the inner webs more or less white, as well as the shafts; from the fifth some white begins to appear on the outer web down the shaft, which increases in the next, and from the seventh to the tenth the whole of the outer web is white except on the point.' Secondaries, dusky; tertiaries, dusky, barred with white, the latter on the tips of the feathers. Greater and lesser under wing coverts, white; tail, white, barred with numerous greyish black bars; in winter white, barred with brown, and tipped with yellowish brown; upper tail coverts, black and white, the latter on the tips, white in winter; under tail coverts, white; legs, toes, the hinder one of which is very small, only

rudimentary, and lying close to the leg, and claws, greyish black.

'In spring the black feathers begin to appear on the breast, and the birds may be observed in various degrees of change from white, with only a few black feathers, to entire and perfect black. The breeding plumage is generally complete by the end of May.'

'Young birds of the year, in autumn are darker than old birds in winter, having a larger proportion of black above and grey below.'—Yarrell.

The full summer plumage is acquired the latter end of May.

Sir William Jardine says 'Two specimens shot a few years since, by the side of one of the Lochmaben lochs, in the month of August, had the ground colour of the upper parts very dark, and the edging and angular spotting of the feathers nearly of the tint of sienna yellow, so as to cause them to appear, when first taken up, to be the Golden Plover; the breast also had the dark parts of the feathers much broader, and the whole tinted over with yellowish wood brown. These were considered to be young birds arrived from migration.'

PEEWIT.

PE-WIT. TE-WIT. LAPWING. COMMON LAPWING. CRESTED LAPWING. GREEN LAPWING. GREEN PLOVER. LAPWING SANDPIPER. FRENCH PIGEON.

Vanellus cristatus, FLEMING. SELBY.
Tringa vanellus, PENNANT. MONTAGU.

Vanellus—*Quære* from *Vannus*—A fan, from the fanning motion of the wings? *Cristatus*—Crested.

THIS very beautiful bird seems to be spread over the whole of the European continent, from Ireland and the Ferroe Isles, Russia, Siberia, Sweden, Denmark, and Norway, to Italy, Prussia, Germany, Spain, Holland, Greece, France, and Sardinia. It is also found in Africa,—in Egypt; and in Asia—in China, Japan, and Persia, and thence to the Black and Caspian Seas, the Lake Baikal and Astrachan.

It occurs throughout the whole of this country, but least plentifully in the midland and south-western parts.

In Cornwall they are not uncommon near Swanpool and Gwyllyn Vase, but a flock of seventeen seen near Pennance, January 17th., 1850, was considered an unusual number.

They frequent open places, heaths, commons, marshy grounds, the sides of drains, fallow and other fields, especially those which have not been drained. Hitherto the low districts of Essex, Kent, Norfolk, Cambridgeshire, and Lincolnshire, have furnished the largest supplies of their eggs, for the London market; but even the last-named county, once so proverbial for watery wastes, is now fast becoming altogether drained, and its agriculture has long since been second to none, so that in time different tenants will, beyond doubt, occupy the soil to the exclusion of others of a different class.

CYFLOGRAPH
DATA

In Orkney they appear in great abundance in March, and remain until the end of October, at which time the greater number migrate southwards. A few however remain stationary throughout the year. They abound also in the Shetland Isles. In Ireland they are common and indigenous.

They collect into large flocks in the autumn, the component parts thereof resolving themselves into their respective individualities in the spring.

Lapwings can hardly be called migratory birds, as some are to be seen nearly throughout the year, but at the end of February or the beginning of March they arrive, first in small and then in greater numbers, on the downs and other open places, frequenting the same haunts annually. They then pair and separate, and so spread themselves over the face of the country. In November, or later if the weather has been till then open, they retire southwards. They are extremely good birds to eat in the autumn and winter, but indifferent in the summer.

They are often kept in gardens, where they are very serviceable in devouring insects, and at the same time ornamental. One has been known to have lived in this half-domesticated state for fourteen years. Bewick gives an account of one thus kept by the Rev. J. Carlyle, vicar of Newcastle; when 'winter deprived it of its usual supply, necessity soon compelled it to draw nearer the house, by which it gradually became familiarized to occasional interruptions from the family. At length a servant, when she had occasion to go into the back kitchen with a light, observed that the Lapwing always uttered his cry, 'pee-wit,' to obtain admittance. He soon grew more familiar; as the winter advanced he approached as far as the kitchen, but with much caution, as that part of the house was generally inhabited by a dog and a cat, whose friendship the Lapwing at length conciliated so entirely, that it was his regular custom to resort to the fireside as soon as it grew dark, and spend the evening and night with his two associates, sitting close by them, and partaking of the comforts of a warm fireside. As soon as spring appeared he left off coming to the house, and betook himself to the garden; but on the approach of winter, he had recourse to his old shelter and his old friends, who had received him very cordially. Security was productive of insolence; what was obtained with caution was afterwards taken without reserve; he frequently amused himself with washing in the bowl which was set for

the dog to drink out of, and while he was thus employed he shewed marks of the greatest indignation if either of his companions presumed to interrupt him.' They are restless, watchful, and shy birds, and rarely approach houses, or even the vicinity of trees, preferring wide and open places. Even when roosting in the middle of the day, some sentinels are on the look out to give timely notice to the flock of any approaching danger.

'The Lapwing,' says Mr. Conway, will fly round and round, tumbling and tossing in the air, and at the same time making the country resound with the echoes of its endless 'pee-wit!' and thus lead the intruder farther and farther from its nest.' Its gyrations on these occasions are such as must strike the most inattentive passer-by, and the thoughtful mind will watch them with pleasing admiration. It is the male bird that is most clamorous on these occasions; the female on being disturbed runs first from the eggs or young, and then flies a little way, near the ground and in silence.

The flight of the Lapwing is indicated by this, one of its vernacular names derived from it, a rather slow flapping of the wings. It seems at one and the same time both laboured and light, and is seen to advantage when the bird is chasing some prowling crow who has come too near. In dashing and whirling about in the air, when you by chance approach the spot where its young or eggs are located, it frequently makes a rushing sound with its wings, which really at times bears a striking resemblance to the puffing of the engine of a railway-train, heard at some distance, or against the wind. Before taking wing it stretches the head out, and previous to alighting skims along the ground.

In Scotland it is said to be considered as an unlucky bird, owing to its having formerly been the means, by hovering about the fleeing Covenanters who chanced to disturb it, of guiding their pursuers to them. On the other hand, it is related that the founder of the family of Tyrwhitt of Lincolnshire, was saved by his followers being thus directed to him where he lay wounded after a skirmish. 'It runs swiftly, in a horizontal position, with the head downwards; during which it has a singular habit of stopping suddenly at intervals, and putting its bill to the ground, but without picking up anything, apparently to bring its body, as it were, to a proper equilibrium.' On first alighting, the wings are stretched up on each side before being settled in their attitude of rest.

It is a fine sight to see a large flock of these birds wheeling about, and as they turn their dark or their light sides towards you, now gleaming and glancing in the setting sun, and now shadowing into the blackness of the dense moving mass. In the spring season 'their flight, particularly that of the male birds, is very peculiar, being subject to a variety of evolutions, in the course of which they frequently dart perpendicularly upwards to a considerable height, then throwing a summerset, as it would seem, in the air, suddenly descend almost to the ground, along which they course with many turnings and great velocity, till the same manœuvre is repeated.' I have been looking at them the day of writing this, and though I had so often watched them before, did so again with increased curiosity.

They feed on worms, slugs, caterpillars, and insects, and this chiefly during twilight or clear nights. Bishop Stanley says that one which a friend of his had, used to stand on one leg and beat the ground regularly with the other, in order to frighten the worms out of their holes. I should have thought that it would have had a contrary effect, but his Lordship gives the following as the theory on the subject: —'Their great enemy being the mole, no sooner do they perceive a vibration or shaking motion in the earth, than they make the best of their way to the surface, and thus fall into a greater and more certain peril.' Dr. Latham says the same.

The well-known note of the Peewit, from whence it derives its name, composed namely of these two syllables, the latter uttered 'crescendo,' 'pe-wit, pewit, pe-wit,' 'pees-wit, pees-wit,' or 'pees-weep, pees-weep,' is one that cannot fail to attract the ear, whether heard for the first or the thousandth time. The French, in like manner, call the bird Dixhuit. It has also a note of alarm or 'quasi' alarm, which after listening to to-day, I can best describe as a sort of whining sound.

The young are often hatched as soon as April, and begin to run about almost immediately after being hatched. Mr. D. M. Falconer relates, in 'The Naturalist,' vol. ii, p.p. 33-34, a curious instance of the parent bird when disturbed from the nest, running off with an egg under her wing, a distance of two hundred yards.

The nest is that which 'Mother Earth' supplies by a small and slight depression in the soil, with the addition sometimes of a few bits of grass, heath, or rushes, and this, perhaps,

answering to the geographical description of an island, 'entirely surrounded by water,' on the marshy ground. To avoid, however, the evils attendant on this contingency, a mole-hill or other slight eminence is often chosen for a cradle. The young are not capable of flying till nearly full-grown.

The eggs, which are, like those of most if not of all small birds, very delicate eating, and sold in immense numbers for the purpose, are four in number; and so disposed in their narrow bed as to take up the smallest amount of room, the narrow ends pointed inwards, like the radii of a circle, to 'one common centre.' They vary to an extraordinary degree, though generally very much alike; some are blotted nearly all over with deep shades of brown. A fine series will be found described in my 'Natural History of the Nests and Eggs of British Birds.' In general they are of a deep green colour, blotted and irregularly marked with brownish black. They are wide at one end and taper at the other, as is the case with the birds of this class. They are hatched in fifteen or sixteen days.

Male; weight, between seven and eight ounces; length, a little over a foot; bill, black; from it and proceeding under the eye is a streak of black bent downwards; the region about the eyes is white; iris, dark brown. Forehead, crown, and back of the head, black glossed with green, ending in a crest of six or seven narrow long black feathers, with a slight upward curve, capable of being raised nearly straight up or depressed at pleasure: they are as much as three inches long or even more. Head on the sides, neck on the back and sides, white, sometimes speckled with black and brown; nape, olive brown; chin, throat, neck in front, and breast on its upper part, black glossed with green, on its lower, white; the chin and throat white in winter. Back above, olive green, glossed with copper-colour and purple; in winter it has less of the gloss and purple, and the feathers are margined with reddish white; on its lower part it is ended by a narrow band of chesnut.

The wings, very much rounded, have the first feather shorter than the fourth, but longer than the fifth, the second and third equal in length, and the longest in the wing; greater and lesser wing coverts, olive green, glossed with green, copper-colour, and purple; primaries, black, but the first three or four greyish white at the end; secondaries, black over the ends, at the base white; tertiaries, green, glossed with green, copper-

colour, and purple. The tail, rather short, is white on the inner part, rich black on the outer, but the white prevailing more over the two or three outside feathers, the extreme one almost entirely white, having only a greyish black spot near the tip of the outer web; the tail has the tip narrowly white. Upper tail coverts, pale reddish chesnut; under tail coverts, paler fawn-colour. Legs and toes, dull orange purple brown; claws, black.

The female generally resembles the male, but the crest is shorter—not much more than half the length, and she is somewhat duller in tint. The mark between the bill and the eye, and the crown, deep brown; chin and throat, white. The back in winter has the feathers narrowly tipped with yellowish white.

The young, when first hatched, are covered with a dark yellowish down with a mixture of brown, and afterwards have the feathers on the upper parts edged with buff; when fledged and in the first year, the crest is very short, the streak below the eye dusky, the whole plumage edged with yellowish brown. Legs and toes, grey with a pink tinge.

Varieties have occurred white, cream-coloured, and dun-coloured.

TURNSTONE.

COMMON TURNSTONE. HEBRIDAL SANDPIPER.

Strepsilas interpres,	FLEMING. SELBY.
Tringa interpres,	LINNÆUS.
" *morinella*,	LINNÆUS.
Arenaria cinerea,	BRISSON.
Morinellus marinus,	RAY.

Strepsilas. *Strepho*—To turn. *Laas*—A stone. *Interpres*—An interpreter. I conjecture from the bird's habit of careful investigation, and turning over, as a translator does in the case of the words of a book.

THE geographical range of this species is wide, extending to all the four great divisions of the globe. On the European continent it is plentiful in Iceland, the Ferroe Islands, Russia, Norway, Sweden, and Denmark, Greenland and Nova Zembla; and with us in Shetland, where it breeds, staying throughout the year. It has also been observed at Madeira, and in Africa—in Senegal, it is said, and several other parts; so far south as the Cape of Good Hope. In Asia, it is included among the birds of Japan, and has been procured from Sunda, the Molucca Islands, New Guinea, and in India, near Madras; as also from New Holland. Selby says, that the species from the American continent is in every respect similar to our own, and Sir William Jardine has received the young from the West Indies, from the Island of Tobago.

In North America, it occurs in various parts even of the extreme north, on the shores of the Arctic Sea, and so also in the opposite direction, even to the bleak and barren Straits of Magellan, the passage through which can never, it seems at least to me, be dissociated from the recollection of 'Lord

TURNSTONE.

Anson's voyage round the world,' a remnant of whose famous ship the 'Centurion,' it occurs to me as I write, to mention, I have hung against my wall among other relics, as being also one of the first of H.M.S. that my father went to sea in;—'ignoscas recordationis benevolens lector.'

In Yorkshire I have seen them on Filey Brigg, that is, Bridge, the base of an ancient cliff, formerly extant, but long since washed into the sea, and which, at low water, is dry for a considerable distance. The species has also been known at the mouth of the Tees, and on other parts of the coast, preferring rocky places. Littoral birds, they frequent the sea-shore, but are at times met with on the banks of the larger rivers and lakes.

The Rev. R. P. Alington has met with it, though but rarely, on the Lincolnshire side of the Humber. In Norfolk it is found, but not in large numbers, arriving in autumn, and retiring again in spring, in the former in August, and in the latter it has been observed so late as the 26th. of May. In Cornwall, near Falmouth, it is rare. It occurs also in Wales.

This is another of our winter visitants, arriving the end of August, and departing in March, April, or May; in the one case in anticipation of the production of a family, and in the other after that event. The young, when full grown, quit, in most localities, the place of their birth, and, in company with their parents, move southwards along the coast. These, for the most part, compose the small flocks of Turnstones that are seen.

They are birds of sociable habits, both among themselves, and towards different kinds, but are shy, otherwise, of approach. They may, however, easily be tamed, and kept in confinement: one has been known to eat out of the hand. They appear to be fond of bathing. The parents exhibit great attachment to their young, but, as is the case with another species, their too great fondness is sometimes the ruin of their offspring, their cries of distress at the approach of an intruder directing attention to them. The like cause produces great pugnacity in them towards other larger sea-fowl; and especially towards the predatory Gulls, who have a natural inclination for the eggs of other kinds.

A curious circumstance is mentioned in the 'Zoologist,' page 2652, by Mr. James C. Garth, of one of these birds having been shot out of a flock of pigeons, and also quite inland, namely, near Knaresborough, in the West-Riding, in

October, 1849; it was a young one. The following much more extraordinary occurrence is narrated by Mr. Edward, in the same magazine, pages 3077-8-9:—

'Passing along the sea-shore on the West of Banff, I observed on the sands, at a considerable distance before me, two birds beside a large-looking object. Knowing by their appearance that they did not belong to the species which are usually met with in this quarter, I left the beach, and proceeded along the adjoining links, an eminence of shingle intervening, until I concluded that I was about opposite to the spot where the objects of my search were employed. Stooping down with my gun upon my back, prepared for action, I managed to crawl through the bents and across the shingle for a considerable way, when I at length came in sight of two little workers, who were busily endeavouring to turn over a dead fish, which was fully six times their size. I immediately recognised them as Turnstones. Not wishing to disturb them, anxious at the same time to witness their operations, and observing that a few paces nearer them there was a deep hollow among the shingle, I contrived to creep into it unobserved.

I was now distant from them but about ten yards; and had a distinct and unobserved view of all their movements. In these there was evinced that extraordinary degree of sagacity and perseverance, which comes under the notice only of those who watch the habits of the lower creation with patience and assiduity; and which, when fully and accurately related, are not unfrequently discredited by individuals, who, although fond of Natural History, seem inclined to believe that anything in regard to animals must necessarily be false, or at least the result of ignorance; unless it has been recorded in books which are considered as of authority on the subject. But to return: having got fairly settled down in my pebbly observatory, I turned my undivided attention to the birds before me. They were boldly pushing at the fish with their bills, and then with their breasts: their endeavours, however, were in vain—the object remained immoveable. On this they both went round to the opposite side, and began to scrape away the sand from close beneath the fish. After removing a considerable quantity, they again came back to the spot which they had left, and went once more to work with their bills and breasts, but with as little apparent success as formerly. Nothing daunted, however, they ran

round a second time to the other side, and recommenced their trenching operations, with a seeming determination not to be baffled in their object, which evidently was to undermine the dead animal before them, in order that it might be the more easily overturned.

While they were thus employed, and after they had laboured in this manner, at both sides alternately, for nearly half an hour, they were joined by another of their own species, which came flying with rapidity from the neighbouring rocks. Its timely arrival was hailed with evident signs of joy. I was led to this conclusion from the gestures which they exhibited, and from a low but pleasant murmuring noise to which they gave utterance as soon as the new comer made his appearance; of their feelings he seemed to be perfectly aware, and he made his reply to them in a similar strain. Their mutual congratulations being over, they all three fell to work, and after labouring vigorously for a few minutes in removing the sand, they came round to the other side, and putting their breasts simultaneously to the fish, they succeeded in raising it some inches from the sand, but were unable to turn it over: it went down again to its sandy bed, to the manifest disappointment of the three. Resting, however, for a space, and without moving from their respective positions, which were a little apart the one from the other, they resolved, it appears, to give the matter another trial. Lowering themselves with their breasts close to the sand, they managed to push their bills underneath the fish, which they made to rise to about the same height as before; afterwards, withdrawing their bills, but without losing the advantage they had gained, they applied their breasts to the object. This they did with such force, and to such purpose, that at length it went over, and rolled several yards down a slight declivity. It was followed to some distance by the birds themselves, before they could recover their bearing. They returned eagerly to the spot from whence they had dislodged the obstacle which had so long opposed them; and they gave unmistaken proof, by their rapid and continued movements, that they were enjoying an ample repast as the reward of their industrious and praiseworthy labour.

I was so pleased and even delighted with the sagacity and perseverance which they had shown, that I should have considered myself as guilty of a crime had I endeavoured

on the occasion to take away life from these interesting beings at the very moment when they were exercising, in a manner so happy for themselves, the wonderful instincts implanted in them by their great and ever merciful Creator. When they appeared to have done and to be satisfied, I arose from my place of concealment. On examining the fish, I found it to be a specimen of the common cod; it was nearly three feet and a half long, and it had been embedded in the sand to about the depth of two inches.'

Meyer observes, 'The general appearance of the Turnstone is very handsome, owing as much to its figure as to its gay apparel; its motions on the ground are graceful and dexterous; it runs much like the Lapwing, every now and then stopping short to rest or pick up food, especially when it has reached any elevation, either large or small; it is able to run very fast, and does so when pursued before it takes wing. Its flight is elegant and quick, performed generally with half-extended wings that are considerably curved; its evolutions are very dexterous, skimming either close over the water or ground, and rising high in the air it seems to depart, when, on a sudden, it returns again to the spot.'

Their food consists of marine insects and their larvæ, beetles, and small crustacea, and these are obtained either among the sea-weed or the rocks left dry at low water, by turning over stones on the beach with the beak—whence the name of the bird. During the time of high water, too, they resort to the lands that border on the shore, and there pick about in search of beetles, worms, and other such.

The note, uttered frequently when flying, is a clear twittering or whistling cry.

The time of breeding is about the middle of June.

They lay their eggs on sandy and rocky coasts, both where a stunted vegetation obtains, and where sterility alone is the characteristic of the scene. They appear to have no tie to any previously-tenanted situation, but choose a new summer residence, like other tribes, if so it suit them, year after year. The nest is sometimes placed under the shelter of a stone, rock, plant, or other break in the surface, and at other times on the mere rock, sand, or shingle. It is but some trifling hollow, natural or scraped out for the purpose, lined, perhaps, with a few dry blades of grass, or leaves.

The eggs, four in number, vary much in colour and markings, some being of a green olive ground, and others of a brown

olive colour; some much and others only a little spotted, principally about the obtuse end, with dark grey, olive brown, and black, or reddish brown of two shades. They are cleverly concealed.

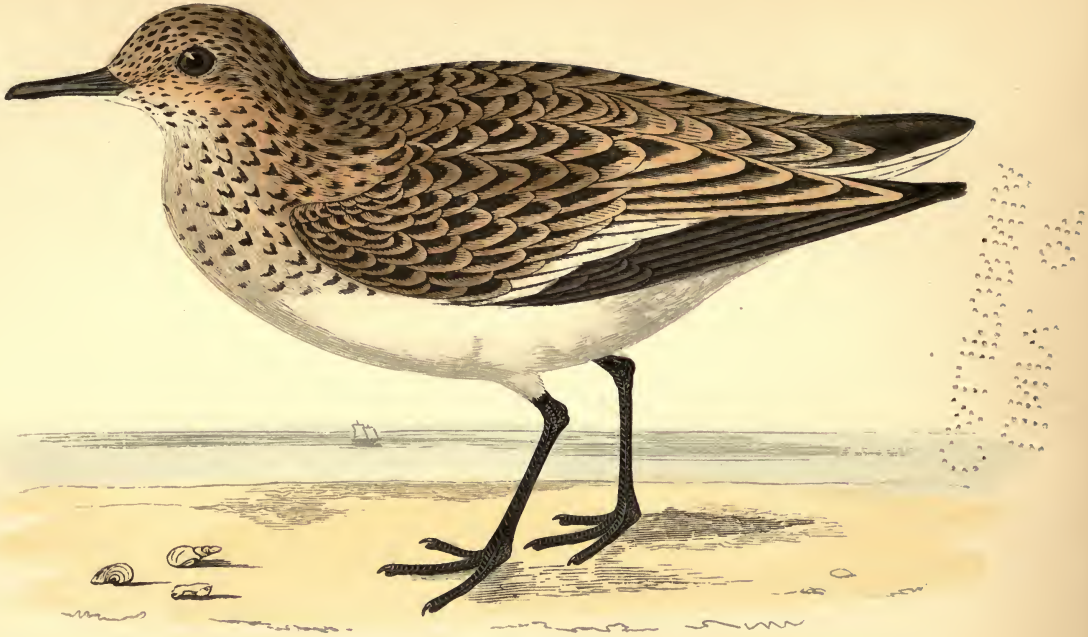
The bird has an elegant piebald appearance, but in winter the colours are more dull. They vary very much in plumage according to age and the season of the year, intermediate shades occurring in each gradation of change. In the spring they are very beautiful, but in August begin to lose their brilliancy. Male; weight, rather more than four ounces; length, nine inches and a little over; bill, thick at the base, black, strong, and turned a little upwards. The upper mandible is rather longer that the lower one. Iris, dark brown; below it is a black patch, which curves upwards to the base of the lower bill, encircling a white spot at the base of the upper one; backwards it goes downwards to meet another which originates at the base of the lower bill; behind the eye is a small black streak or mark; over the eye is white. Forehead, black, reaching to the eye on each side in the line aforesaid; crown, white, with black feather shafts; neck on the back, white, on the sides rich black; nape, white; chin, white. Throat, rich black, from which a black collar extends backwards to the back of the neck, where that from each side meets. Breast above, rich black, partly separated from the black of the throat by a white patch or spot, below white; back above, black, intermixed with red rust-coloured feathering, forming irregular rows; below white, with a bar of black over the tail coverts.

The wings have the first quill feather a little longer than the second, and the longest; underneath they are white; the axillary plume white; greater wing coverts, black, edged with red or dark brown orange, and tipped with white, but the whole plumage varies much with the season of the year. In like manner the lesser wing coverts are dusky and dark red, the edges pale; primaries, greyish black, the shafts white at the base; secondaries with broad white tips, forming a distinct bar across the wings; tertiaries, long, and nearly black, tipped and spotted with red, or dark brownish orange. Tail, at the base, white, the remainder greyish black, tipped with white, with the exception of the two middle feathers; the outer feather is white; upper tail coverts, white. Legs and toes, rich orange red; claws, black, 'the hind toe articulated on the inner surface of the tarsus, and directed inwards towards

the other leg, not backwards as in most other birds.' The three front toes are connected at their base by a short membrane.

The female closely resembles the male, but the colours are not so distinct or bright, and the white on the head and neck is less pure.

'In young birds of the year the whole of the plumage of the upper surface of the body, and round the throat in front, is dull brownish black; the feathers of the body edged with yellowish white; those of the wing coverts and tertials edged with reddish buff colour; the chin, breast, and under tail coverts, white; the legs and toes, pale orange.'



SANDERLING.

SANDERLING.

CURWILLET. TOWILLY.

Arenaria calidris,	Gould.
" *vulgaris*,	Stephens.
Calidris arenaria,	Temminck. Jenyns.
Charadrius calidris,	Pennant.
" *rubidus*,	Gmelin.

Arenaria. *Arena*—Sand—sea-shore. *Calidris*—.....?

This is a bird of very pleasing appearance, and tolerably well known on most of the sandy shores of Great Britain and Ireland, as well as at times met with by the side of inland waters.

It appears in Iceland, Greenland, Siberia, Sweden, Denmark, Norway, and other parts of the north of our continent, as well as in the south, in France, Germany, Italy, and Holland; also in Labrador, and other arctic regions of America, and in the North Georgian Islands. It goes, on the other hand, as far south as Mexico and the Brazils, and is met with likewise in northern Africa, and in Asia on the shores of the Black Sea, and the lakes and rivers of Persia, and in Japan, it is said, and in Sunda and New Guinea.

The Sanderling is not very unfrequent on the English shores, throughout the island; seventeen were shot in one day, October 12th., 1846, in some stormy weather, in the neighbourhood of Brighton, but not one specimen, says Mr. Thomas Thorncroft, writing to me on the 29th. of May, 1850, has occurred there since. In Yorkshire they have been met at the mouth of the Tees; also near Burlington, and along the coast, generally in the autumn. In Cornwall, near Falmouth, they are uncommon. In Norfolk they occur,

but only in limited numbers; most are seen in the spring and autumn. It has been noticed as late as the last week in May.

In Scotland it is also known. Charles St. John, Esq. records it as occurring in Sutherlandshire; Sir William Jardine on the banks of the Solway Firth; and the late William Thompson, Esq., of Belfast, in Ireland.

This species occasionally visits Orkney during winter, or early in spring. It has been observed at Scapa, at Orphir, and in Hoy.

It breeds in the north, but some have been met with here in the summer season, as, for instance, in the Mull of Cantyre on the 2nd. of June. It migrates in April, and in August or September, and is related to do so in the night, and principally along the sea-shores, or across the sea itself. Possibly those which are met with here in the former of the two latter months, as well as others, may have been with us, in some part of the island, all the year.

They go in small flocks, and also consort, not unusually, with the Dunlin, as also occasionally with the smaller of the Plovers, but this seemingly when their own numbers are few, keeping with them on the ground, and accompanying them in their flights. They sometimes however assemble in flocks of several hundred individuals, and then their own company suffices them. If forced by any sudden alarm to separate, they re-unite again as speedily as they can. They are very sociable and friendly birds, gentle and pleasing, and are easily kept in confinement; neither in their wild state are they at all shy, but quietly permit a near approach. They are very active and busy in their motions, running about much, with ease and swiftness, over the same ground, in search of food. They roost frequently in a sitting position.

The flight of the Sanderling is both graceful and strong, and when the bird moves from place to place it follows the course of the shore, a little above the surface of the water. 'When it alights it sails a short distance, and then flutters a little before touching the ground in order to break its descent.'

They move about, when feeding, in a horizontal position, the head and neck lowered, and the former drawn very close in upon the shoulders: they run very swiftly.

They feed on small marine worms, insects, and larvæ, to be found on the beach, which they procure by probing with

their bills in the soft sand; and also on shrimps, sandhoppers, and other crustacea and minute shell-fish, and other 'treasures of the deep;' with which they swallow a little gravel. They become very fat, and are considered fine eating.

The note is only a 'pit, pit.'

The nest is said to be placed in marshy places, and formed in a rude manner of grass.

The eggs are described as being four in number, of a dusky colour spotted with black.

Male; weight, about two ounces; length, about eight inches; bill, black—between it and the eye is a dusky space, which in winter becomes a small black spot; the feathers at the base of the beak white. Iris, brown; over it is a buff-coloured streak, white in winter; the head on the sides, white, spotted with dusky and rufous; the crown, neck on the back, and nape, have the feathers black in the centre, edged with pale rufous, in some white; on the sides the neck is covered with small spots of rufous and black on a white ground, the shafts also of these feathers being blackish brown; on the back and the nape, much the same: in winter, all these back parts are grey with dusky shafts to the feathers. Chin, throat, and upper part of the breast, white or greyish white, spotted more or less with rufous and black—in winter all white; breast below, white. The back has the feathers black edged with rufous, on the lower part dusky, barred with cinereous and with rufous edges to the feathers; in winter white on the sides.

The wings have the first quill feather a little longer than the second, and the longest in the wing—underneath they are white; the axillary plume white. Greater and lesser wing coverts, dusky, with the centres of the feathers darkest: the former, in winter, are broadly tipped with white, forming a bar across the wing. Primaries, brownish black on the outer web, greyish white on the inner, the shafts white; secondaries, blackish brown, with broad white tips, forming a bar across the wings; tertiaries, also blackish brown edged with pale rufous. Tail, cuneated, greyish white, the middle feathers greyish black margined with white, and rather pointed; upper tail coverts, dusky. Legs and toes, bluish black; claws, black. The toes underneath are flattened.

The female is rather larger than the male.

'In the first or nestling plumage, the forehead, eye streak, cheeks, and throat, are white. At the lower part of the neck

is a zone of pale cream or yellowish white, which passes into light ash grey upon the upper part of the breast; under parts of the body white. Crown of the head, black, margined and spotted with pale buff; nape and hind part of the neck, pale ash grey, with darker streaks; mantle and scapulars, black, margined and spotted with white. Tertials, hair brown, margined with greyish white. Quills and tail, as in the winter plumage of the adult bird. Legs, deep grey.'—Selby.

Mr. Yarrell observes 'The appearance of the Sanderling in spring, when in change to the plumage of summer, is prettier than at any other season; each feather on the upper surface of the body exhibits a portion of black in the centre, edged partly with rufous, and partly with the remains of the white peculiar to winter; by degrees the white edging gives place to the red; the neck in front becomes speckled, but the under surface of the body remains white all the year.'

'A female killed at the end of August, has the upper surface of the body darker than in the spring, but mixed with dull black, some red, and greyish white; almost all the red colour of the breeding-season has disappeared, but the autumn moult having commenced, a few of the greyish white feathers of the winter plumage appear intermixed with the faded remains of the tints of summer.'

'In winter the plumage on the upper surface of the body is of a very light ash grey, almost white, the shaft of each feather forming a darker streak; carpal portion of the wing and the primary quill feathers almost black. Tail feathers, ash-colour edged with white; chin, throat, and all the under surface of the body, white; beak, legs, toes, and claws, black.'

The full winter plumage is obtained by the end of October. Previous to that time, the Rev. Leonard Jenyns gives the following as the description of the young bird:—'Feathers on the crown of the head, back, scapulars, and wing coverts, black edged and spotted with yellowish; between the bill and the eye a cinereous brown streak; nape, sides of the neck, and sides of the breast, pale grey, with fine undulating streaks; forehead, throat, fore part of the neck, and all the under parts, pure white; wings and tail as in the adult.'

UNIV. OF
CALIF.

OYSTER-CATCHER.

OYSTER-CATCHER.

PIED OYSTER-CATCHER. SEA PIE. OLIVE.

Hæmatopus ostralegus, PENNANT. MONTAGU.
" *belonii*, WILLUGHBY.

Hæmatopus. *(H)aima*—Blood. *Pous*—A foot. *Ostralegus.*
Ostræa—An oyster. *Lego*—To collect.

THIS fine and handsome bird is well known on the coast in many parts of England and Ireland, from the Scilly Islands to the extreme north. In Europe, its range extends from the southern countries—Holland, France, and Spain, to Denmark, Sweden, Norway, Russia, Siberia, Kamtschatka, the Ferroe Isles, and Iceland. In Asia, it is described as occurring in Japan, and in Africa, as far as Senegal, and in America, also from Hudson's Bay to the Bermudas.

In Yorkshire, Mr. Allis reports, on the authority of Mr. Eddison, that it is, though rarely, met with near Huddersfield, and that two were obtained on Slaithwaite and Marsden Moors, in winter, near the reservoirs. In other parts of the kingdom too it has occurred inland. Four are recorded to have been met with at Godalming, in Surrey, and one also at Oatlands by the Thames, fifty miles from the sea. James Harley, Esq. gives it as occasionally occurring on the banks of the Trent, and mentions a pair killed at Melbourne Pool, on the borders of Leicestershire, in January, 1838. They seem to be the most numerous on the Lincolnshire coast, near Skegness, and other parts. On the Norfolk coast it is common throughout the year, breeding there, as it also does in the Fern Islands, on the coast of Northumberland, and in Scotland, in Sutherlandshire, and elsewhere. It has been known to breed several miles inland, as much as twenty-five, or thirty, or more, namely, on the banks of the Don, in Scotland, and up as high

as Kildrummy; likewise at Ballindalloch. Dr. Fleming, too, relates that it breeds, 'down by the Tummel,' at Moulincarn, between Dunkeld and Blair Athol; and Sir William Jardine has seen them on the Tweed as high up as Dryburgh.

In Orkney this species continues the whole year; a few additional birds, however, generally arrive in spring. In Shetland it is also numerous, as well as in the Hebrides or Western Islands.

They are seldom seen inland, though that is the case sometimes, but are principally to be noticed on the rocky shores of inlets, and the sand banks of bays and creeks, and mud-covered flats, where scant oases of vegetation and moist patches are interspersed. One was shot on the River Wey, near Guildford, Surrey, on the 23rd. of March, 1845.

They are occasionally migratory to some extent, namely, in very inclement weather, but otherwise appear to be stationary. In the former case, flocks of several hundreds move together at a great height, both by night and by day, the body forming two sides of a triangle, the whole led by one bird. Their voices at such times are heard in the distance, and the more so if the regular line happens to be broken.

In winter they unite in small flocks, which again in spring divide into pairs, but several of these resort to the same breeding-places. The male bird keeps watch while the hen is sitting, and gives notice by a loud shrill whistle of the supposed approach of any danger. The hen, if need be, silently quits the nest, and after making a circuit to deceive as to its situation, joins her partner, and both unite together in endeavouring to decoy away the supposed enemy with loud cries, flying round and round him, often very near. Any such, however, that are winged, as, for instance, a Crow, Rook, or Skua-Gull, they are quick to give notice of the approach of, and attack and drive away from the neighbourhood with blows from their powerful bills. They are tameable birds, and will associate with domestic poultry. In their wild state, too, they play about in a lively manner with their own and other species, and at times enter into contests, attacking fearlessly even such as are larger than themselves. They are watchful and shy in their habits, avoiding betimes any suspicious intruders.

They run about in an easy manner, and also, if necessary, with great rapidity, and can both swim and dive, the former not unfrequently, for short distances, when seeking for

food; but the latter, for the most part only if alarmed. The young too evince the same habits, and run about almost immediately after being hatched. They fly strongly, and sail for some short distance before pitching down.

They feed in the mornings and evenings, and at night, on various shell-fish—mussels, limpets, and other crustacea; worms, and marine insects. For dislodging the former their strong and wedge-shaped bill is admirably adapted. They roost during the day, standing either on one or both legs on a stone, rock, or bank. While the tide covers their feeding-places they repair to the neighbouring corn and other fields, which they again quit for their more natural resorts as soon as permitted.

They are extremely noisy during the time that they have young, screaming loudly, or scolding in their defence. Meyer says, 'the call-note of the bird in question sounds most like the word 'quip' or 'whip,' uttered in a very high tone, and repeated several times when on the wing; the concert is generally begun by one bird in a moderate 'tempo,' which increases to 'allegro,' and finally 'presto, presto,' being joined by an increased number of voices until all unite in the chorus.'

The nest is placed among gravel or stones, or among grass near the sea bank, in situations above high-water mark, where these materials of building are at hand, and the bird seems to be especially partial to a mixture of broken shells, which it carefully collects together and places in a slight hollow in the ground, using considerable care in their disposition. Several nests appear to be made, sometimes, before the architect can fashion one to give perfect satisfaction; many nests are placed in contiguity to each other, intermixed too, it may be, with those of other aquatic birds. Some have been met with on the top of isolated rocks, at a height of from ten to fifteen feet from the ground. In lieu of shells small pieces of stone or gravel are selected, and the whiter they are the better they seem to please. Incubation lasts about three weeks.

The eggs are four in number, and of a yellowish stone-colour, spotted with grey, brown, and brownish black. They have been found variously in April, May, June, and July, so that it would appear that two broods are reared in the year. The eggs are disposed with their small ends inwards.

The young birds run soon after they are hatched, and are

very active. If pursued they hide their heads in the first hole they come to, as if thinking, like the Ostrich, that if they cannot see you, you cannot see them.

Male; weight, about sixteen or seventeen ounces; length, a little over one foot four inches, or from that to one foot five, or Sir William Jardine says, to one foot seven inches; the bill, which is three inches long, is of a deep orange yellow colour at the base, and paler towards the tip, which is much compressed; iris, crimson red, the eyelids reddish orange, below the eye is a small white spot in the autumn and summer months. Head, crown, neck on the back and sides, in front, and the nape, black, of a glossy velvet appearance; chin, throat, and the breast above, glossy velvet black, the latter below, white; in winter there is a white gorget more or less developed on the front of the neck, begun to be assumed in the autumn, and worn till the spring. Back, above, glossy velvet black, with a reflection of green and bluish ash-colour; below, white.

The wings have the first quill feather about half an inch longer than the second, and at the same time the longest in the wing—underneath they are white, the axillary plume also white; they expand to the width of two feet eight inches; greater wing coverts, white on the tips, forming a broad bar over the wing; lesser wing coverts, glossy velvet black; primaries, dusky black, with part of their inner webs white, in the shape of an oblong spot towards the tip; secondaries and tertiaries, black, with a reflection of green and bluish ash-colour; greater and lesser under wing coverts, white. Tail, white on the inner half, black on the outer; upper tail coverts, white. Legs and toes, pale purple reddish, deeper coloured with the season; claws, dusky black.

In the winter the plumage is not so clear and bright.

The male and female are alike. They are said to moult both in the spring and autumn.

The young are at first beautifully mottled over with greyish brown down. In their first year's plumage they have the bill yellowish brown, tinged with orange, the back and wing coverts margined with brown, and the white is not so pure; the feet are greyish white tinged with pink. The white gorget is not put on till the second winter.

Sir William Jardine says that he has seen specimens of a dull white or fawn-colour.

The plate is taken from a design by the Rev. R. P. Alington.

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CRANE.

CRANE.

COMMON CRANE.

Grus cinerea, FLEMING. SELBY.
Ardea grus, PENNANT. MONTAGU.

Grus—A Crane. *Cinerea*—Ash-coloured.

THE great numbers of these birds said in old chronicles and records to have been formerly served up at the table, inclines me to think that as the Heron is even now continually called a Crane, so it may have been often in reality the species thus spoken of; any of the Heron tribe being indiscriminately classed as a Crane. No doubt, however, it was formerly much more numerous than of late; and now it is indeed a very rare and casual visitor.

The Crane pertains to Russia and Siberia, Lapland, Sweden, Finland, and Norway; Mecklenberg, Thuringia, Turkey, Greece, Pomerania, Poland, Prussia, and is found in Holland occasionally in hard winters; and at the 'certain seasons' of migration, Mr. Gould says that flocks of these great birds are to be seen in France and Germany, travelling northwards or southwards as the case may be, high in the air, and marshalled for 'the route' which has been given them. Their clear sonorous voices aloft resound below, and direct the eye to them. Sometimes they are tempted to descend to feed in newly-sown fields, or marshes, or on the borders of rivers, or the shores of the sea; but generally they are diverted by no attraction from their one main object, but steadily wing their way to the distant country which they have in view, although they cannot see it, and to which they are directed by the GREAT KING.

At these times they are also observed at Corfu, and other islands of the Mediterranean. Cranes also occur in Africa—namely in Egypt, and other parts—even at the Cape of Good Hope; and in Asia—in Asia Minor, in the regions between the Black Sea and the Caspian Sea, in Arabia, Syria, Persia, China, Hindostan, and in Japan.

In Cambridgeshire one was obtained, according to Pennant, in the year 1773; and Ray mentions that in his time large flocks of these birds visited the fens during the winter months. Aldrovandus speaks of their having formerly bred in that county, and Willughby also corroborates the fact. Now, however, they are no longer seen, and need no longer be looked for there; the Fens are no longer fens, and any unfortunate Crane who should visit the haunts of his ancestors, would find himself sadly 'out of his element,' and that 'with a vengeance' from some ruthless gunner. How the birds must execrate the memory of the man that invented gunpowder, and thus superseded the, to them, comparatively harmless use of the bow and arrow! In Norfolk, one, a female, was shot at Kirkley, near Lowestoft, in the month of April, 1845; they were formerly, says Sir Thomas Browne, often seen in that district in hard winters. One was shot at Pevensey, in Sussex, in May, 1849. In the same year, about the end of December, one, apparently a young bird, in Norfolk, at Martham. In Devonshire, one was obtained in September, 1826, in the parish of Buckland Monachorum, near Plymouth. In Oxfordshire, one in December, 1830, and another, it is said at Chimneyford, on the Isis, in December, 1831.

Sir Robert Sibbald mentions the occurrence of the Crane in Orkney; and Sir William Jardine, Bart., says that it has occurred there recently. Dr. Fleming states that a small flock was seen in Tingwall in the autumn of 1807. Mr. Dunn also mentions two having been shot in Zetland in 1831 and 1832; and a small flock had previously been seen there, one of which was shot, in the autumn of 1807.

In Ireland it was met with during the great frost in 1739.

They migrate both by day and night, in the spring and autumn, halting to rest, for the most part, in the middle of the day. The autumnal migration takes place between the 12th. and the 20th. of October, and the same line of flight appears to be closely kept each successive year. The spring migration to their building-grounds takes place from the middle of March or the middle of April according to the

forwardness or backwardness of the season. In fine weather they proceed leisurely, but if a change is brooding, accelerate their movements. It is said that they never fly due north and south, but rather east and west. Excepting at the times of migration, Cranes are only seen singly, or in pairs; but at those seasons they collect in large flocks of several thousands, subdividing into groups of from twenty to sixty, one of the largest and strongest birds heading each of these, spread out behind him into two diverging lines, each group keeping near together. They affect lowland and flat countries, resorting in summer to morasses, or any damp and moist places, wading about on the insecure ground in search of food, which they also seek at times in the neighbouring cultivated lands. It is said, however, that they prognosticate a dry season, and in anticipation of such do not resort to their accustomed haunts, as if aware that these would no longer afford them the necessary protection, owing to their dried state.

In fine weather they may not unfrequently be seen sailing overhead, as if enjoying the pastime; sometimes they ascend to a great height until no longer visible. They are by nature shy birds, and for the most part apparently sedate and pensive, but on some occasions addict themselves to playing and gambolling about in an odd and curious manner. They are very watchful, and sentinels give due notice of the propinquity of any danger. Their manners are intelligent, their gait majestic, their form being robust and at the same time well proportioned: they are striking and noble looking birds. They roost on the ground, flying round and round first to reconnoitre the position before trusting themselves to alight, and this on some open place from whence a good look-out can be kept. They seldom perch on trees or buildings.

If leaving her nest the Crane creeps along for a great distance in a stooping position, before shewing herself in flight, so that, in addition to the difficulty imposed by its position, the nest is not easily found.

Among themselves they are very sociable, and never quarrel one with another, or with other kinds. They are easily tamed, and soon become attached to those who take care of them. They are, however, susceptible of anger, and when provoked become dangerous.

Meyer writes, 'Brehm relates some interesting particulars

of a pair of Cranes which he had procured when the birds were only a few days old. This pair of Cranes, a male and a female, became soon tame, attached themselves to their keeper, and came when called by their respective names. Their lodging was in the farm-yard, where they very soon took the lead, settled the quarrels of their companions, and punished the offenders according to circumstances. They exacted respect and kept up their own dignity, ruling over bulls, cows, foals, etc., but declining at all times to interfere with the pigs. When their master walked out they accompanied him wherever he went; and as they were not sufficiently pinioned to prevent their flying, they sometimes remained out for the whole day, although they invariably returned home at night. When a flight of wild Cranes passed over, the two birds alluded to never shewed so much as a wish to follow them. When the male met with an accident in breaking his wing, the female behaved with the most sensible affection, never leaving her mate for a single instant while he was ill; nor would she allow any stranger to approach him, until he was able again to go about with her. Not long after the female met with an injury which ended fatally. The male shewed his grief in return, by going about and screaming most piteously, and trying to raise up his sister; and after her corpse was removed the survivor went to look for her in every corner of the house, ran up and down stairs, and stopped at closed doors until they were opened to let him in, in order to satisfy his search. Not finding her anywhere, he left the farm-yard for two or three days, then again was found, quite disconsolate and dejected in the grounds, and allowed himself to be driven into his stall, where he stayed for a length of time. When the bird became full-grown he continued to shew a wonderful share of cleverness, far beyond any other feathered species.

For want of a companion this Crane attached himself to the bull of the farm-yard, which he accompanied wherever he went; marching beside the bull, or standing by when the animal grazed, and keeping off the flies. He followed him in and out of the stable, and when the bull did not make his appearance soon enough in the morning, the Crane went to fetch his companion out. At times when the bull stood still for some time in the meadow, the Crane would run a little in advance and begin to chase round about him for amusement; then again he would turn suddenly back and come to

meet him, bowing most profoundly: and this became a frequent amusement to the inhabitants of the village, through which the couple passed on their way home in the afternoon of a summer's day.

Some time after the Crane became as serviceable as a shepherd's dog to the kine, and would not allow a single animal to stray from the rest. When horses were being harnessed for the plough, or put to any carriage, the Crane placed himself before them, and made them stand quiet until the driver was on the box or had the reins in his hands. It was of no use for the horses to attempt to move on, for the bird punished them sorely with blows from his bill, or spreading out his wings stopped the way. The greatest attachment was shewn by this Crane to the cook of the family, who was in the habit of feeding the bird; and he made it a rule not to go to bed until she took him up under her arm, and conveyed him to his sleeping apartment.

When any one insulted this Crane the bird was unforgiving and revengeful in the extreme. One day when the bird was in pursuit of some insects in a neighbouring garden, the owner of the garden gave him a blow with a stick, whereupon the bird defended himself most valiantly until a succession of blows obliged him to retire. Soon after the Crane took his station on a bridge that led to the village, and over which the person in question had to pass. The Crane maintained the ground, and at last pursued the enemy until he was obliged to take shelter in his house and shut the door. From that time the Crane remained the determined foe of his neighbour. The courage of the Crane in question was wonderful, yet on one subject he was always accessible to fear, namely, he could not endure the sight of any black moving object, such as a black dog, cat, or crow; and his greatest enemy was the chimney-sweeper.'

They fly with the head and neck extended, and the legs also projecting behind. Their manner of walking whether fast or slow, with long and regular steps, is elegant and pleasing. When at rest or sleeping they generally stand on one leg, the other being drawn close up, and the head reclined backwards, the bill being thrust among the feathers.

They feed on food of various kinds, peas, corn, and other grain and plants, worms, reptiles, and shell-fish, snails, slugs, caterpillars, roots, cockchaffers, grasshoppers, flies, and mice.

'The call-note of the Crane is a very loud, harsh, and

peculiar sound, and is best described by comparing it to a trumpet sounding the word 'curr' or 'coor,' and this accounts for the birds being heard long before they are seen. The young birds of the year utter the word 'sheeb,' or 'weeb;' when very young they chirp. When a great flock is on the wing, the cry of these birds is consequently confused.'

The Crane nidificates both on low trees, stumps, and bushes, and also on the ground; sometimes too on the top of some old building, as well as upon a conglomerate mass of rushes or other water plants, among high grass or reeds, and in osier beds, and other such situations, in morasses, and by the sides of lakes. The nest is a large structure, made of sticks, with grass, rushes, flags, reeds, and other soft materials. The young remain for some days in the nest, and are fed by the parents with food prepared in their own crops.

The eggs are two—they are richly coloured, of a pale olive green ground, blotted and spotted with darker shades of green and olive brown. Both birds incubate them.

The unicoloured plumage of this bird is relieved by the fine red.

Male; weight, nearly ten pounds; length, four feet or more, up to five feet; bill, dark greenish yellow at the base, paler towards the tip; iris, red; from the eye and down the side of the neck is dull white; bristles spread over the forehead and the space to the eye, which part is dark bluish or blackish grey; the sides of the head are greyish white; crown, bare of feathers and red in an oval shape; neck on the back and nape, dark bluish grey, with a hue of brown; here also is a bare place ash-coloured. Chin, throat, and neck in the front, also dark bluish grey; breast, fine bluish grey; back, dark bluish grey.

The wings have the first quill feather a little shorter than the fourth, but a little longer than the fifth; the second and third being the longest in the wing, and both of the same length. Greater and lesser wing coverts, dark bluish grey; primaries, black; some of the secondaries are long and arched, as also the tertiaries, which are dark bluish grey, varied and tipped with bluish black, their elongation forming long hair-like plumes, the webs being unconnected, which the bird raises or depresses at pleasure. They used formerly to be in much request as ornaments for head dress. Tail, bluish grey, tipped with bluish black; legs and toes, light bluish black; claws, black.

The female is like the male, but not quite so large, and her plumage not so clear; the plume also is less developed.

The young birds, after being at first covered with greyish brown down, are less varied in plumage about the head, and the grey colour is commingled with brown. They do not acquire their perfect dress till after the second moulting, previous to which the crown is covered with downy feathers.

HERON.

HERN. HERONSHAW. HERONSEWGH. COMMON HERON. CRESTED HERON.

Ardea cinerea,	LATHAM. SHAW.
" *major,*	LINNÆUS.
" *cristata,*	BRISSON.

Ardea—A Heron. *Cinerea*—Ash-coloured—grey.

EVERY one who is acquainted, as who is not? with Miss Edgeworth's ever entertaining stories—lacking, however, one thing, and that *the* one thing—a pervading religious principle—will remember the ineffable contempt and indignation with which Sir Plantagenet Mowbray received the proposition of Marvel, the Lincolnshire farmer, to purchase the Heronry near Spalding.

There, for I shall proceed to give a catalogue of all the Heronries in the kingdom extant and extinct, 'both great and small,' so far as I can furnish a complete one, compiled for the most part from the pages of 'The Naturalist,' was formerly a very great one at Cressy Hall, the seat of the ancient Heron family, appropriately yclept. In that county others were or are at Manby, near Brigg, the property of the Earl of Yarborough; Downington, Skillingthorpe Wood, near Lincoln, and Swanpool.

In Yorkshire, likewise, by the piece of water near Hemsworth, Pontefract; at Kirby Hall, near Boroughbridge, the seat of Richard Thompson, Esq.; at Walton Hall, near Wakefield, the seat of Charles Waterton, Esq.; Watton Abbey, near Beverley, one of the seats of Richard Bethell, Esq.; and Swanland, near Hull. Also at Scorbro', near Beverley, one of the seats of Lord Hotham; and Scarthingwell,

HERON.

near Ferry-bridge, a seat of Lord Hawke; also one of the islands in Hornsea Mere.

In Wiltshire, at Bowood, the seat of the Marquis of Lansdowne, near Melksham.

In Suffolk, at Henham Hall, the seat of Lord Stradbroke.

In Devonshire, at Shute Park, near Axminster, the seat of Sir John George Pole, Bart.; Powderham Castle, the beautiful seat of the Courtenays, Earls of Devon; Warleigh, the seat of the Rev. W. Radcliffe, near Totnes; and Sharpham on the River Dart.

In Surrey, at Cobham Park, the seat of Harvey Combe, Esq.; Ashley Park, the seat of Sir Henry Fletcher, Bart.; and by Walton-on-Thames.

In Sussex, at Parham and Hurstmonceaux.

In Durham, at Gainford, on the bank of the Tees; at Sands, near Sedgefield; Ravensworth Castle, the seat of Lord Ravensworth.

In Kent, at Chilham Castle, the seat of J. B. Wildman, Esq.; at Cobham Hall, the seat of the Earl of Darnley; and Penshurst Park, an old seat of the Earls of Sydney.

In Warwickshire, at Warwick Castle, the seat of the Earl of Warwick.

In Norfolk, at Wolverton Wood, near Lynn; Castle Rising, Didlington Hall, the seat of Colonel Wilson.

In Westmoreland, on Berkshire Island, Windermere; on Rydal Lake, the property of Lady Le Fleming; and Bassenthwaite, on the property of Sir Henry Vane; also at Dalham Tower, the seat of W. Carus Wilson, Esq.

In Dorsetshire, at Upton House, and Brownsea Island, Poole, near Weymouth; Bryanston Park, near Blandford, the seat of Lord Portman; Admiston Hall; Dewlish, the seat of Colonel Mitchell; Kingston Lacy and Sherborne Park, the seat of Earl Digby.

In Northamptonshire, at Bulwick, the seat of J. Fryer, Esq.; and Althorpe, the seat of Lord Spencer.

In Middlesex, at Oatlands Park, near Shepperton.

In Cheshire, at Dunham Massey, the seat of the Earl of Stamford; Combermere Abbey, the seat of Lord Combermere; Hooton, the seat of Sir T. M. Stanley, Bart.; Ardley Hall, the residence of R. G. Warburton, Esq.; and Oulton Park, the seat of Sir Philip De Malpas Grey Egerton, Bart.

In Berkshire, in Windsor Great Park, the Royal Residence; Coley Park, and near Reading.

In Cumberland, at Gowbay or Gowbarrow Park, near Ullswater; and Greystock, both near Penrith.

In Hampshire, at Denny Lodge, in the New Forest; and formerly at Heron Court, the seat of the Earl of Malmesbury; as also at Harringworth, on the estate of Thomas Tyon, Esq.

In Essex, in Wanstead Park.

In Nottinghamshire, at Colnwick, near Nottingham, the seat of — Musters, Esq.

In Northumberland, at Chillingham Park, the seat of the Earl of Tankerville.

In Cornwall, at Trenant Wood, the seat of W. Peel, Esq.

In Shropshire, at the Mere, near Ellesmere.

In Leicestershire, at Stableford, near Melton Mowbray, on the estate of Lord Harborough; and a pair built about the year 1812 in a wood called Mere Hill, in the Lordship of Prestwold, the seat of Mr. Packe, M.P., but the nest being taken, the birds forsook the place.

In Somersetshire, at Picton, the property of Lord Carnarvon; and at Brockley woods, near Bristol.

In Herefordshire, at the Moor, near Hay, the seat of Mrs. Penoyre.

In Wales, in Glamorganshire, at Margam Abbey, and Penrice Castle.

In Anglesea, near Holyhead and the Great Orme's Head.

In Flintshire, at Bodrydden, near St. Asaph, the seat of William Shipley Conway, Esq.

In Scotland, on the Island of Islay, in Kincardineshire, at Inglesmaldie, Fettercairn, the Sutors of Cromarty, and in Sutherlandshire, between Aikel and Altnagalcanach; and on an island in a loch near Louberoy.

In Ayrshire, at Monkcastle House, and near Eglinton Castle, and Craigie, near Kilmarnock.

In Edinburghshire, at Dalkeith Palace, the seat of His Grace the Duke of Buccleuch; and in Morayshire by Findhorn.

In Ireland, in the county of Dublin, at Carton, near Maynooth, the seat of the Duke of Leinster; and in the county of Galway, at Newport House.

The almost total discontinuance of hawking, and the consequent dispersion of the great Heronries of the olden time, carefully then preserved for the purpose, have naturally led to the establishment of smaller settlements in various other places, and even of single pairs from time to time. The

changes that the lapse of ages introduces into the human colony, work a corresponding effect, in an infinite variety of ways, among the natural creation.

These birds are generally common in Yorkshire and other counties; in Cornwall, near Falmouth, not common.

In Scotland they are plentiful. In Orkney they remain all the year. There, in winter, they assemble in flocks on the shores, and are generally observed on the lee side of an island.

Heronries are inhabited from spring to the latter end of summer, and are occasionally returned to by individual birds in the winter months from time to time. They are clung to with great tenacity by their occupants.

The Heron visits the northern countries of Europe—Russia, Siberia, Denmark, Sweden, Norway, the Feroe Islands, Iceland, and Greenland; and wanders southwards over other parts of the continent, being the most plentiful in Holland. It is found also in northern Africa, and, it is said, at the Cape; likewise in Madeira. In Asia—about the Caucasian range, and in India, Japan, and Java.

Our Herons stay with us throughout the year, and others are indeed compelled hitherward by severe weather: in other continental countries a similar movement southwards is made, such migration being effected as well at a high as at a low elevation. In August, 1849, one was shot at Stoke Newington, near Highbury, Middlesex, close to London, and another was also seen near Highbury, in July, 1851.

They are shy and solitary birds, and make off at once if approached, when standing in ever so apparently listless a manner by the side of the pool, or the margin of the stream. Clear water is preferred, on account of the better view it affords of their prey. I remember well one fine summer evening, when a boy, seeing one 'light at a bend in a small river, where I thought I could manage to get him within range, and after running home for a gun, and stealing close to the ground till near him, when he at last perceived his danger and rose suddenly to escape it, bringing him down by a shot through the neck. It was a young bird, and the only one, I am glad to say, I ever killed, or, I believe, ever fired at—alas! 'tempus fugit.'

If not cut off, they are said to be long-lived birds. They are formidable if attacked at close quarters, defending themselves, so to speak, both with tooth and nail. They are

always objects of interest, and comport well with the retired unfrequented scenes to which, and to which only, they seem naturally to belong. There you may see the Heronshaw for hours standing on one leg, on the ground or a branch of a tree, the neck retracted and the bill resting on the breast, 'chewing the cud of sweet or bitter reflection,' according as he has been comparatively satisfied, or is waiting for a further supply of food. One might almost fancy that he was musing in pensive melancholy over the altered times which have changed protection and proscription, and foreshadow, to look on the dark side of things, the future extirpation of the English branch of his race. Royal game in the days of falconry, and prized also for the table, now-a-days he is the object of all but universal hostility, and his conspicuous appearance marks him out as a victim. But the 'silent system' chiefly during the day-time, interrupted only by some occasional flights, the consequence oftentimes of being disturbed, for as soon as the lowering twilight begins to give notice of returning night, then listlessness is exchanged for excitement, and inactivity for movement—the bird walks about in an unsettled manner, and stretches his wings preparatory to making use of them to convey him to his fishing-ground.

Seen for the most part at other times of the year in the singular or the dual number, these birds become gregarious in the building-season. An island in a lake is then a favourite resort, but some leave it for the adjoining inland. They are indeed to be observed together in greater or less numbers at other times, perhaps in groups of from a dozen to thirty, but this, I fancy, more from a community of purpose, than from an instinctive desire to congregate. They appear, as before said, to select the lee or sheltered side of any island or cliff when engaged in fishing. Several battles take place sometimes between them and the Rooks, for the possession of the same trees, but the Herons, as might be supposed, are too powerful for their opponents. At other times, as if in revenge for this injury, Rooks may frequently be seen chasing and dashing at them in the air, following them for a long way, and buffeting them at every opportunity. Meyer says 'It is remarkable how alarmed Herons are during storms of thunder and lightning, starting at every flash, and tumbling about as if broken-winged. During rainy weather these birds appear very dejected, and sit in the most drooping

attitudes imaginable; they appear to suffer also from frost and cold.' If taken young, Herons may be easily reared, but not otherwise. Two Herons have been known to fight so desperately, that one of them allowed itself to be taken with the hand.

The flight of the Heron, in which the wings are much arched, and the neck doubled back, is slow and heavy, and the long legs are carried straight out, projecting behind as if a tail: the legs are drooped before alighting. They are able to swim, but perform the operation slowly. Though generally speaking of an awkward and ungainly appearance, yet the different curvatures assumed by this bird in its positions give it a line of beauty which the ornithologist at all events can appreciate and admire.

Herons are very voracious birds, and always seem hungry. Their usual food consists of trout, flounders, eels, carp, and other fish, which they swallow head foremost; water-lizards, snakes, toads, frogs, rats (both land and water,) and mice; the young of other birds, beetles, and other insects, shell-fish, shrimps, and the roots and blossoms of plants: a trout has been seen taken about four pounds weight. A curious circumstance is recorded in 'The Naturalist,' vol. i, page 61, by Mr. Mc'Intosh, as related to him by an eye-witness, who, having shot a Snipe, it was pounced upon by a Heron, not previously observed by him, and shaken by it in his bill till satisfied that it was quite dead. Another has been known to quit the water to kill or disable an eel which it had caught by beating it against the ground; and again another, a tame one, to swim out ten or a dozen feet to try to seize the brood of a Moorhen on a fallen tree.

The hair, feathers, and bones of their prey are cast up in pellets, after the manner of the Owls. 'It is perhaps worth remarking, that when the Herons drop any of the food which they bring to their young among the trees of the Heronry, they make no attempt to recover it, but, probably from a consciousness of their inability to rise from the ground in a confined space, allow it to remain where it falls.' The result is often beneficial to the neighbours, and a good pannier of fish may often be collected under a large Heronry. The prey is brought from a distance, it may be, of two miles or more to the young, and much ado with snapping and chuckling the latter make on the bringing home of each fresh supply.

They feed ordinarily in the mornings and evenings, but

when they have a young family to provide for, are obliged to forage throughout the days. Standing motionless in the shallow edge of the river or lake, the head, as before remarked, drawn back in the attitude of expectation, you may see them watching, with the patience for which all other anglers ought to be equally proverbial, for a 'bite.' True waders, their food is mostly picked up in the water, but none is refused that occurs elsewhere. If dropped from the bill, it will be picked up again more than once at the place of capture. It is very rarely indeed that the Heron misses its mark. It strikes with the most unerring precision, and transfixes the quarry with the strong blow that it gives.

Their note is a harsh, wild cry, uttered on the wing, and frequently repeated, 'the word 'craigh' uttered in a lengthened manner, with cracked and high-pitched voices,' as the bird heavily wends its way to any accustomed haunt by the bank of some river, reedy lake, or rushy pond, the margin of some muddy estuary, or creek. or the edge of some stagnant swamp or quaggy morass. It is also heard while on migration.

The Heron builds, according to circumstances, either on the ground, in which situation Montagu saw several, or on trees of any sort; also, it is said, on cliffs, preferring situations in the vicinity of water. Many nests are often placed on it together—as many as eighty have been counted in one tree. Preparations for nidification are made about the month of April. The nest is placed on the very summit of the tree, or as close to it as the case will admit of, and also near the extremity of the branch, the size of the bird not admitting of a ready passage inwards. The nest, flat in shape, is rather small for the size of the tenants that have to inhabit it, but in some cases is much larger than in others, probably from an old one being built on. It is made of stick and twigs, and has a lining of wool or hair, rushes, dry grasses, water-flags, straws, or any soft materials.

Two broods are reared in the season, and both parents assist in the work of providing the young with food, and the male also feeds the female while sitting. If alarmed for their young, they soar about aloft over the nests.

The eggs are generally three in number, sometimes, it is said, four or five, and of a green colour. They vary in shape, some being pointed at both ends, and others only at the lower end. They are hatched in about three weeks, and it

is five or six more before the young birds are able to quit the nest.

The finest specimen of this bird that I think I ever saw, is preserved in the hall of the Rectory at Swinhope, the residence of my friend, the Rev. R. P. Alington. It was shot in the parish of Thoresway, Lincolnshire, February 21st., 1853. The following measurements are taken from it:—

Male; weight, only about three pounds, or from that to three and a half, according to the condition the bird is in from a plentiful or a scanty supply of food; length, three feet two inches and a half; bill, dull yellow, darkest towards the point. The edges of both mandibles are serrated and very sharp, the lower fitting closely into the upper—woe betide the fish that gets between them. From the base of the bill a narrow streak runs over the eye, and a larger one which merges into the occipital feathers. Iris, yellow, a streak of black over it rises from the base of the bill; forehead, head on the sides, and crown, white. The plume is seven inches and a half long, and of a glossy dark slate-colour, in some specimens glossy dusky black; neck behind and nape, grey; in front the neck is white, or greyish white, variegated, in a long list or stripe, with elongated spots of dark bluish grey, forming a double row; chin, throat, and neck in front, pure white. Breast above and below, greyish white, with streaks of black on the latter portion; the elongated feathers on its uppers are pale grey, and many of them pure white. There are two patches of yellow down on the front, concealed by the other feathers. Back, dark grey.

The wings expand to the width of five feet; the first quill feather is of equal length with the fifth; the second, third, and fourth are also nearly of the same length, and the longest. Greater and lesser wing coverts, grey; primaries and secondaries, dusky black. Tail, short, dark slate-colour, in some dusky black. The legs, when stretched out behind, extend five inches and a half beyond the tail; in colour they and the toes are greenish yellow, tinged with brown; the middle one is serried on the inner edge; above the knee the legs are tinged with orange. Claws, brown.

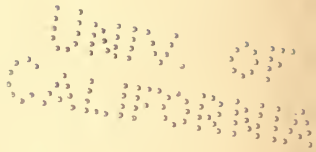
The female resembles the male, but her colours are more dull. The plume is deficient, and the feathers on the breast are less elongated.

The young are at first unsightly in appearance, but soon advance in size; during the first and part of the second year

they are destitute of the plume, and of the elongated feathers on the front of the neck. The bill has the upper mandible greenish or blackish brown, the lower one greenish yellow. Head, crown, neck, and nape, ash-colour; throat and neck in front, ash-colour, with dull dusky grey streaks; back, grey, with tinges of brown. The legs above the knee, greenish yellow, below, and the toes, pale brown, tinged with yellow, or else grey.

They do not attain the full plumage till the end of the second year.

The plate is from a design by the Rev. R. P. Alington. I will thank any one to shew me a better.



PURPLE HERON.

PURPLE HERON.

CRESTED PURPLE HERON. PURPLE CRESTED HERON.
AFRICAN HERON.

Ardea purpurea,	Linnæus.
" *caspica,*	Pennant. Montagu.
" *variegata,*	Latham.
" *rufa,*	Latham.
" *botaurus,*	Gmelin.
" *stellaris major,*	Ray. Willoughby.

Ardea—A Heron. *Purpurea*—Purple-coloured.

The European range of the Purple Heron extends from Holland, where Sir William Jardine has observed that it is not uncommon—France, Germany, Italy, Hungary, and Switzerland, to Russia, Turkey, Siberia, and the distant borders of the Black and the Caspian Seas. In Africa also, from Nubia to the Cape of Good Hope; and in Asia—in Tartary, India, and Java, and the Philippine Islands.

Several specimens of this elegant and beautiful species have been obtained:—In Norfolk three or four, one of them in May, 1830. In Yorkshire one, a male, at Temple Thorpe, near Leeds, the 24th. of May, 1850; and one near Harpham, in the East-Riding, on the Lowthorpe stream, one, if I may be allowed a brief digression, of the best trout waters that I know; and where, when I have been able to spare time for an occasional holiday, I have, as one of the 'favoured few,' thanks to the kindness of the St. Quintin family, had by no means indifferent success in fly-fishing; as also in another preserve on the same river, a little lower down.

Anglers, or at all events that branch of the family to which alone I belong, that which disdains every means of capture but the artificial fly, are, it is perhaps too well known, apt,

differ considerably in size and shape, as well as in colour.' They are generally dull green. Both parents carefully attend to the young until they are able to fish for themselves.

Male; weight, two pounds and three quarters, to nearly three pounds; length, about three feet two inches; bill, fine yellow, the ridge and tip shaded with brown; a narrow stripe of black proceeds from the base of the bill backwards to the nape; iris, pale yellow. Forehead and crown, black tinged with blue, the feathers lengthening into a long narrow crest, the filaments of a chesnut colour, while a line of the same colour is carried down the back; on each side of the neck a narrow stripe descends, mingling with the more irregularly dark edges of the lengthened plume; the upper part of the neck in front is white, shaded off into the brown of the sides where the black stripes do not prevail; on the front of the neck each feather is elongated into the attenuated form, the colours a mixture of pale buff, chesnut, grey, black, white, and purple red. Chin and throat, pale buff or white; breast on the upper part, black, met on each side by deep purple chesnut, or brownish red, the middle rich maroon shaded off below into a mixture of that colour and dark slate grey. The plumes of the back are narrowed and elongated, the narrow tips being paler, and those at the sides the longest, and of a pale reddish brown; the one side of each is yellowish white, the other black, 'and thus irregular lines of these colours are formed, until the long tips become entirely yellowish white.'

The wings have the first quill feather the shortest, the second, third, fourth, and fifth equal in length, and the longest: the edges of the wings are white. Greater and lesser wing coverts, dark brownish grey with purple and green reflections; primaries, dark brownish grey; greater and lesser under wing coverts, chesnut, the colour extending over the point of the shoulder. Tail, dark brownish or bluish grey, with purple and greenish reflections, the two centre feathers dark slate grey; upper tail coverts, brownish grey, also with greenish reflections. Legs in front, both above and below the knee, dark reddish brown, tinged with greenish yellow; behind yellow; toes, also brown—reddish brown tinged with greenish yellow; the middle toe is very long; under parts of the toes yellowish. Claws black, lengthened, slender, and not much bent.

The female is like the male.

The young, until three years old, have the upper bill

blackish brown, the under one pale yellow; iris, pale yellow; the crest does not appear. Forehead, blackish grey; crown, grey, tinged with reddish brown, as is the back of the head; the neck, pale reddish brown in colour, has the stripes of black only slightly indicated, and the elongated feathers are wanting; in front it is yellowish white, with longitudinal black spots. Breast below, reddish white; back, deep grey, the feathers margined with reddish brown. Tail, deep grey, the feathers margined with reddish brown.

'In the immature bird brown is the prevailing colour, the upper plumes being all broadly edged with it. The crown and occiput, chesnut, without a crest, and the sides and fore part of the neck yellowish white, marked on both with lengthened dashes of brownish black; no elongated feathers either there or upon the back.'—Sir William Jardine.

GREAT WHITE HERON.

GREAT WHITE EGRET. GREAT EGRET.

Ardea alba,	Pennant. Montagu.
" *egretta*,	Fleming. Temminck.
" *candida*,	Brisson.
" *alba major*,	Ray.
" *egrettoides*,	Gmelin.

Ardea—A Heron. *Alba*—White.

The Great White Heron is, or has been, found, in various parts of Europe occasionally, namely, in Germany, France, Turkey, Hungary, Italy, Corsica, Sardinia, Greece, and the Islands of the Grecian Archipelago, and in Sweden. In Asia, likewise, in Asia Minor, India, Great Tartary, and the neighbourhood of the Black and the Caspian Seas, and Persia.

Of this species one was seen on the borders of the River Avon, in Devonshire, in the autumn of the year 1805; three or four of the Common Herons having been previously observed in company with it. Another on the banks of the River Stour, in Essex, on the 3rd. of October, 1834; one having been also noticed in the spring on the Oakley shores, as a third was subsequently, by the Rev. Revett Shepherd, and the Rev. William Whitear, by the River Orwell. One is mentioned by Montagu, on the authority of Dr. Latham, as having been killed in Cumberland, and another as having been seen by the Rev. Mr. Vaughan in Devonshire. In Yorkshire, as communicated to the British Association, at their session at Newcastle, in 1838, by Arthur Strickland, Esq., one was seen about the year 1825, or 1826, at Hornsea Mere, in the East-Riding. One at New Hall, shot by John Townend, Esq.; the fact communicated by Dr. Farrar to Mr.

GREAT WHITE HERON.

Thomas Allis. Another, in full summer plumage, was shot by an husbandman at Scorborough, near Beverley, a seat of Lord Hotham, about the year 1835. In Nottinghamshire, one near Osberton, the seat of G. S. Foljambe, Esq. In Lincolnshire one, and in Oxfordshire, one on the banks of the Isis, in September, 1833. Another was also seen in Cumberland on the shores of the Solway; and one was shot, a few years since, near Thorney Abbey, Cambridgeshire, of which J. R. Little, Esq., of St. John's College, Cambridge, has written me word.

In Scotland, one, in Haddingtonshire, near the village of Tyninghame, on the Frith of Forth.

Their migratory journeys, says Meyer, are performed in the day-time, at a great elevation, by two to four birds in number.

These birds haunt still pools, and other such places, in which they wade in search of prey. They often perch on the highest parts of lofty trees. They are of a somewhat shy nature, but sociable among themselves, yet exclusively so. They are, however, soon domesticated, and live for many years—ornaments to the poultry yard.

They feed on fish, reptiles, molluscous animals, water-insects, their larvæ, worms, and any young birds that are so unfortunate as to come within their reach. These doubtless are most sought towards night-fall, when the 'pale cold moon' glimmers on the water in the mournful solitudes which are the general resort of this and its kindred species. If by chance, or, it may be, not by chance, you are alone, in such a place, at such a time, when either a dead silence prevails, or the wind sighs and soughs through the uncultivated wastes, how pleasing is the melancholy which cannot but be felt. You seem spell-bound to the spot, and while the lowering darkness evokes an indescribable emotion—akin to fear, you yet shrink from breaking the charm, and are loth to leave the mysterious scene.

The note, a mere wild cry, is described by Meyer as not very loud, and resembling the syllable 'rah.'

The nest, a very loose structure, built of sticks, reeds, flags, and rushes, and lined with dry grass or leaves, is placed generally on the ground, but sometimes on low trees, almost always, according to Audubon, overhanging the water, and many being placed in contiguity, as in the case of the common species. The same situation is resorted to, and the old nest

repaired year after year, by the same pair. Low marshy places, covered with trees, by the sides of ponds, lakes, and swamps, are those appropriated to nidification, and sometimes flat islands at a distance from the main land.

The male bird feeds the female while she is engaged in sitting; and when the young are hatched both parents unite in supplying their wants.

The eggs are three in number, and of a pale bluish green colour.

Male; length, three feet and about four or five or six inches; bill, yellow at the base, blackish brown towards the tip; iris, orange yellow, round it the bare space is pale green. The feathers at the occiput are rather elongated and thick. Head, crown, neck, nape, chin, throat, breast, back, wings, greater and lesser wing coverts, primaries, secondaries, tertiaries, greater and lesser under wing coverts, tail, and upper tail coverts, which are long, loose, and pendant, white. These feathers, continued down from the upper part of the back, were formerly in great request as plumes for head-dress, and are still much worn by the Turks, and other eastern nations, for that purpose. Legs, toes, and claws, almost black, the former tinged transparently with pale yellowish.

The female is like the male.

The young do not acquire the elongated feathers on the back of the head, and the lower part of the front of the neck, until the third year. Bill, blackish green, tinged with yellow; legs, greenish black.

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LITTLE EGRET.

LITTLE EGRET.

EGRET HERON.

Ardea garzetta, PENNANT. MONTAGU.

Ardea—A Heron. *Garzetta*—.....?

THE elegant and graceful Egret, whose whole plumage is white as the driven snow, resembles the preceding one—'sic parvis compenere magna'—in all but size; and is likewise assignable to the same localities, as being found in Europe occasionally—in Germany, Switzerland, Italy, Poland, Sicily, France, Spain, the south of Russia, Hungary, Turkey, Sardinia, and the islands of the Grecian Archipelago; and likewise met with in Asia—in Persia, and the neighbourhood of the Black Sea and the Caspian Sea. So also in Africa—in Egypt and Nubia in the east, and Senegal in the west.

Specimens have been recorded as having occurred in this country as follows:—In Hampshire, one near Christchurch, in the beginning of July, 1822; in Cornwall, two near Penzance, in April, 1854. In Warwickshire, two or three near Sutton Coldfield; in Devonshire, one at Flatoars, on the River Dart, in the year 1816; one also, mentioned by Montagu, in Anglesea; it was a bird of the second year. A. Cleveland, Esq. mentions in the 'Zoologist,' page 3116, that one was shot in the south of Devon, in April, 1851.

In Ireland, Mr. Templeton records one as having been shot in the harbour of Cork.

Meyer says 'The localities usually chosen by this species, are generally the swampy banks of rivers and lakes, where the flags and reeds are of low growth; or the vicinity of woods and large trees, in which the birds roost at night.'

'On the wing, the Little Egret is rather quicker in flight than the larger species, but in windy weather it is very helpless, and is obliged to skim low over the bushes and reeds on its passage from one piece of water to another. But when the weather is fine, this bird may be seen, if startled up by intrusion of any kind, circling up high in the air, as if surveying the neighbourhood before it finally decides upon its course.'

If taken young, they are easily domesticated to a certain extent, and are gentle and harmless in their manners and habits. The long feathers, Bewick says, were formerly used to decorate the helmets of warriors, as now the turbans of the Persians and the Turks, and the head-dresses of European ladies.

They feed on fish, frogs, and other small reptiles, water insects and their larvæ, and worms. 'The manner in which it obtains its food is by walking stealthily along shore in a stooping attitude, with the head drawn back; as soon as it perceives a desirable object, the Egret darts its pointed bill like lightning upon it, and seldom fails to obtain its prey.'

This species, like the others, breeds in marshy places, either on the ground among reeds, or on the top of a willow stump, or on the branches of a low tree, about half a dozen feet from the ground. The nest is made of dry sticks and rushes, flags, reeds, and grass; the latter being placed inside.

The eggs are four or five, or six, in number, and, one account says of the same white colour as the bird, or another, of a pale bluish green colour.

Male; weight, about one pound or upwards; length, one foot eight to one foot ten or eleven inches, or even two feet; bill, bluish black, the base of the upper one pale ash-colour; iris, yellow; the eyelids, pale green. A dependent crest, so to call it, springs from the back of the head; it is composed of two narrow feathers, four inches in length. Head, crown, and neck, the lower part of which is also adorned with similar long feathers, nape, chin, throat, breast, and back, white; hair-like plumes spring from its centre, their ends curve upwards, and the bird, if suddenly disturbed or alarmed, generally sets them up.

The wings have the first and fourth quill feathers equal in length, the second and third the longest, and also of equal length, 'inter se.' Greater and lesser wing coverts, primaries, secondaries, tertiaries, greater and lesser under wing coverts,

tail, and tail coverts, white. Legs, bright black above the knee on the bare part, and the upper half of the part below it is dark yellowish green; toes, also blackish green with a tinge of yellow; claws, dusky black.

The young are at first, it is said, greyish white; they are without the elongated filaments to the feathers on the back of the head and the lower part of the neck in front and the back. The lower bill is whitish for more than half its length from the base.

BUFF-BACKED HERON.

LITTLE WHITE HERON.
RED-BILLED HERON. RUFOUS-BACKED EGRET.

Ardea æquinoctialis,	PENNANT. MONTAGU.
" *russata,*	SELBY. JENYNS.
" *affinis,*	HORSFIELD.

Ardea—A Heron. *Æquinoctialis*—Equinoctial.

THIS species of Heron is a native of the southern parts of Europe—in Turkey, about the mouths of the Danube, on that intermediate sort of 'neutral' soil which 'nec tellus est nec mare,' as also in the Crimæa—both localities so full of interest at the present moment to others than ornithologists. In Dalmatia, and near the Caucasian range of mountains. In Asia, it likewise occurs in India and Japan, according to M. Temminck; also in the Dukkun, Himalaya, and Nepaul, where it is plentiful in Upper Hindostan, and by the bank of the famous Gunga, as also in Java, Sunda, and the adjacent islands.

One specimen, a female, was shot by Mr. F. Cornish, at South Allington, in the parish of Chivelstone, near Kingsbridge, in Devonshire, in the end of October, 1805. It was observed for several days in the same field, attending a herd of cows.

It appeared to be by no means shy.

It fed on insects.

Male; length, about one foot eight inches; bill, yellow, darker at the tip; the upper mandible slightly curved; iris, bright yellow. Head on the crown, back, and sides, of an orange colour, but the base of each feather white, the orange-coloured ends formed of the loose unconnected filaments of

BUFF-BACKED HERON.

CYPRIAN
PRAY SB.

the web. Neck behind and nape, shining white; chin, throat, and breast above, white, tinged with golden yellow, the latter below pure white; back above, white, on the middle part brilliant orange, and the filaments of the feathers sufficiently long to reach beyond the ends of the closed wings; on the lower part again the back is white.

Greater and lesser wing coverts, primaries, secondaries, tertiaries, greater and lesser under wing coverts, tail, and tail coverts, all shining white. Legs, yellow, the joints darker and tinged with lead-colour; toes, also darker yellow, and tinged with lead-colour. The middle claw is pectinated.

The male and female are alike in plumage.

Young; bill, orange yellow; iris, pale yellow; crown of the head, buff; the feathers on the back a little elongated, but scarcely to be called a crest; neck on the upper part in front, buff, on the lower part the feathers are more elongated, and, though not slender, hang detached over the upper part of the breast. Nape, chin, throat, breast, and back, snowy white. The wings, when closed, completely cover the tail. Greater and lesser wing coverts, primaries, secondaries, tertiaries, greater and lesser under wing coverts, and the tail, which is slightly forked, and tail coverts, all snowy white. Legs on the joints, and the bare part above them for about an inch and a half, nearly black, tinged with green; toes and claws also nearly black, with a tinge of green.

SQUACCO HERON.

RED-LEGGED HERON. DWARF HERON. SENEGAL BITTERN.
SWABIAN BITTERN. SQUAIOTTA HERON. CASTANEOUS HERON.

Ardea senegalensis,	GMELIN.
" *ralloides*,	SCOPOLI.
" *comata*,	PALLAS.
" *squalotta*,	GMELIN.
" *castanea*,	GMELIN.
" *erythropus*, var. β,	LATHAM.
" *pumila*,	LATHAM.
" *marsigli*,	GMELIN.
Cancrofagus rufus,	BRISSON.
" *luteus*,	BRISSON.

Ardea—A Heron. *Senegalensis*—Of Senegal.

THIS kind appertains to Europe, being found in Turkey, Hungary, Sclavonia, Italy, Greece, and its islands; France, and Sicily; also at times in Switzerland, Silesia, Germany, and Holland; likewise to Asia—in Persia, Syria, and Arabia, and along the Black Sea and the Caspian Sea, in which region it is abundant; and to Africa—in Nubia and Egypt.

In Yorkshire one of these birds was killed on the low grounds below Askern, in the West-Riding; other specimens have occurred in various other counties—one in Devonshire, near Kingsbridge, in July, 1840, as also in Somersetshire, in 1825, near Bridgewater. In Cornwall, one near Penzance, about the year 1844, and one seen at Hayle a few days after; one at Scilly in the autumn of 1842; also in Devonshire; Hampshire; Wiltshire, where one was shot at Boyton by Mr. Lambert, in 1795. Suffolk; Norfolk, where one of those procured had entangled itself in a fishing-net, hung up to dry, by Ormesby Broad, in December, 1820. Bewick

SQUACCO HERON.

CANCELLED

mentions the occurrence of this one, a male, a few miles from Yarmouth, as recorded in the 'Globe' newspaper on the 4th. of that month. A second was shot at Oulton, in May, 1831; another near Yarmouth, in the same month of the same year; and a third at Ormesby, in June, 1834. Cambridgeshire, a fine adult bird in perfect plumage; and Lincolnshire. One in the county of Durham, near Stockton-on-Tees, on the 9th. of October, 1852.

They migrate usually in April and September, travelling generally together, but unfrequently only in pairs.

It inhabits the banks of morasses and stagnant pools, the sides of rivers, lakes, and ponds, and the 'Low Countries' that border on the sea-shore in some parts. During the day it frequently roosts or sleeps in open situations, or at most under the shelter of some tree or bush, but otherwise wanders about in search of food for itself or its young, which it is said only to seek during the day-time. This species is fond of associating with cattle and animals. It is said at times to perch on trees, particularly in the spring season of the year. They are easily tamed, if brought up from the nest, and are ornamental birds in a poultry yard, and at the same time quiet and harmless.

Its flight is soft and light, but not quick, performed with even beatings of the wings, the legs being stretched out behind, and the head and neck drawn in towards the body. On the ground it is active, though not quick in its movements. It stands upright when at rest, with the neck shortened, and fronts the wind.

It feeds on small fishes, molluscous animals, frogs, and insects; and in search of these it stalks, like the other birds of its class, through the bogs and morasses, where they are the most to be found.

The note is described as resembling the word 'carr,' or 'charr,' and is said to be only uttered if the bird is alarmed, or is about taking wing, though this it frequently does without making any attempt at calling out. The odd name of Squacco, which this bird bears, is said to have been given to it by the natives about Bologna, in Italy: I conjecture from some fancied resemblance to its note.

The nest is said to be built on trees.

Male; length, about one foot five or from that to one foot seven inches; bill, pale bluish green for nearly two thirds from the base, darker in colour towards the point;

iris, bright yellow; forehead, yellowish brown, each feather bordered with black. The feathers on the crown of the head are pale yellowish brown, streaked longitudinally with dark lines, the feathers becoming elongated towards the back of the head, with a dark line along each outer edge. 'The feathers forming the occipital plume are eight, or nine, (or ten,) in number, and from four to six inches in length; lanceolate, pointed, pure white along the centre, bounded on each side with a blackish line, with a very narrow terminal margin of white. The colour a pale reddish brown in those upon the surface, passing into a delicate buff-colour in those underneath.' Neck on the sides and front downwards, rich yellowish buff; chin, throat, and breast on the upper part, pure white; below the latter is pale orange cream-colour. Back above, pale orange cream-colour, lower down rich yellowish buff, with a tinge of violet-colour, the feathers elongated, the webs disunited, each filament having the appearance of a single hair. These long feathers reach to the end of the wings when closed.

The wings have the first and third quill feathers equal in length, and only a very little shorter than the second, which is the longest in the wing; the axillary plume pure white. Primaries, secondaries, and some of the tertiaries, white; part of the latter tinged with buff. Tail, pure white; tail coverts, also white; legs, dusky yellowish brown, tinged with red; about the joint, greenish yellow; toes, brown above, yellow underneath; claws, black.

The female resembles the male, but the crest is usually not so long.

In the young the upper bill is brown, tinged with dark green; the under one yellowish green. The head is without the occipital crest. The descending marks on the neck are longer and broader, and the lighter ground-colour more mixed with brown; throat, white; back, reddish brown, but the dorsal plumes are wanting. Greater and lesser wing coverts, of a brown colour, tinged with buff, with longitudinal streaks of a darker hue. The primaries have the exterior webs ash grey, and the interior ones white; tertiaries, reddish brown at the ends; legs and toes, yellowish green.

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NIGHT HERON.

NIGHT HERON.

NIGHT RAVEN. SPOTTED HERON.
GARDENIAN HERON. LESSER ASH-COLOURED HERON.
JAMAICA NIGHT HERON.

Nycticorax europæus,	STEPHENS.
Ardea nycticorax,	LINNÆUS.
" *gardeni,*	GMELIN.
" *jamaciensis,*	GMELIN.
" *grisea,*	LINNÆUS.
" *badia,*	GMELIN.
" *cracra,*	LATHAM.
" *obscura,*	LATHAM.

Nycticorax. *Nyx*—Night. *Corax*—A Raven. *Europæus*—European.

THIS curious bird is described by most authors as a native of each of the four quarters of the globe. In Europe, it is said to be especially abundant in Hungary, and occurs also in Denmark and Norway, on the shores of the Baltic, and in France, Spain, Portugal, and Italy. In Asia—in Persia, and the neighbourhood of the Caucasus, India, China, and Japan. In Africa—at the Cape of Good Hope; and in North America, in which latter region it is the most abundant, that is, if it be indeed the same species, but the Prince of Canino doubts their identity, and Wilson says that the American bird is larger than the European one. This, however, I believe, is the case with other species that are certainly the same.

In England, one was shot near London, in 1722, and preserved in the Leverian Museum, the collection of Sir Ashton Lever. One near Thame, in Oxfordshire, by Lord Kirkwall, in 1798; one was shot in Norfolk, in May, 1824, out of the North Gates, Yarmouth; it was perched on a

fruit tree—a curious instance, as W. R. Fisher, Esq. has observed in a letter to me, of the odd places in which birds will alight on their first arrival. In America, however, but the species there, as I have already remarked, may be distinct, it would appear from what I have presently to quote from Audubon, that they must frequently resort to trees, as it is on them that their nests are placed; and, indeed, it seems that they go to them regularly at night to roost. Six or seven other examples have occurred in the same neighbourhood at different times. Eight of these birds were killed on the River Erme, Devonshire, in June, 1849, one of them by R. A. Julian, Esq., Jun. In Cornwall one, a male, was shot on the 28th. of March, 1844, and one near Helston, about the end of April, 1850. In Lancashire, one near Blackpool, on the 14th. of June, 1853. Specimens have also occurred in Buckinghamshire, Sussex, Dorsetshire, Bedfordshire, where one was shot near Ampthill, in 1791; Suffolk, and Kent.

In Wales, in Flintshire and in the Isle of Anglesea.

In Scotland one, a male, at Hirsel, near Coldstream, in Berwickshire, in the spring of the year 1823; and another in Dumfriesshire, near Dumfries, on the banks of the Cluden, a tributary of the River Nith.

In Ireland, two have been procured, as recorded by the late William Thompson, Esq., of Belfast, namely, one at Letterkenny, the other, a young bird, in the county of Armagh.

It is a migratory species, moving southwards during the months of September and October, and northwards again in April and May. They appear to move, for the most part, singly and by night.

These birds live together in societies. They are active, and feed during the night, resorting, in the day-time, to tall trees in the neighbourhood of swamps, lakes, and rivers. They frequent such situations, returning at night-fall to their feeding-grounds. If alarmed during the day-time, they do not move off to any great distance, but to the next most convenient place of concealment. They may be kept in confinement, but mope in a dull and heavy manner while daylight continues. The young are esteemed as an article of food, and are much sought after in consequence. During the time that they are engaged with incubation, the old birds are said to be very noisy, as well as very watchful.

When on the wing their flight is soft and noiseless.

The food of the Night Heron consists of fish, reptiles, any small animals, leeches, worms, and the larger water insects. The prey is swallowed whole.

The note is hoarse and hollow, resembling the syllable 'qua,' from whence, in America, the name given to the species of Qua Bird. Meyer describes the note as sounding like the word 'cowow.'

These birds form heronries, either, according to Audubon, near plantations, or the interior of retired and secluded swamps, as well as on some of the sea islands covered with evergreen trees. These are formed in low bushes, or in middle-sized or tall trees, as seems most convenient or secure. In some places the nests are placed within a few yards of the ground, many on the branches, others between the diverging boughs of the trees; in others at the tops of the trees, at an elevation of not much more than twenty feet; and in others again in tall cypresses, at a height of a hundred feet, or thereabouts. Hundreds may be seen at once in those countries where the birds live. These remarks however, it is to be observed, apply to the American birds. The nest is fabricated of sticks, and is large in size and flat in shape; it is lined with reeds, rushes, grass, and leaves.

The eggs are commonly four in number, sometimes five, and of a pale greenish blue colour. Selby says, 'as soon as the young have gained sufficient strength, they climb to the top of the trees, where they are fed by the parents till they are able to fly, and support themselves.'

The young, in their very different livery, have been described as a different species.

Male; length, from about twenty-two inches and a quarter, to twenty-three inches; bill, black, inclining to yellow at the base, a white line extends from it over the eye; iris, deep reddish orange; the eyelids, greenish or bluish white. Forehead, white; crown, black with green reflections; neck on the sides, tinged with grey, on the back, and the nape, black with green reflections: from the head springs an occipital plume of feathers, generally three, but sometimes four in number. They are concave beneath, the one fitting within the other, so as to appear like a single plume; this the bird has the power of raising or depressing according as it is alarmed or irritated, or at rest; and thus they 'part to meet again:' the upper one is the longest, sometimes measuring about eight inches in length; they are tipped or not with

brown or black, according to the age of the bird; chin, throat, and breast white, with a very faint tinge of cream-colour. Back, on the upper part, black, with green reflections, on the lower part fine grey.

The wings expand to the width of three feet three inches and a half, or a little over that measurement, the first quill feather is of the same length as the fourth, the third a little longer, the second the longest in the wing. Greater and lesser wing coverts, grey; primaries, secondaries, and tertiaries, grey; greater and lesser under wing coverts, pure white. Tail and tail coverts, fine bluish grey. The legs are feathered nearly to the knees; the bare part and the toes, pale yellowish green. Claws, black, short, and hooked; that of the middle toe pectinated on its inner side.

The female is like the male.

In the young the tip of the bill is blackish brown, the remainder dark brown, the edges paler in colour; the base and lower mandible, yellowish green or yellowish brown; iris, brown, the eyelids pale greenish brown, head, crown, and neck on the back, brown, with the centre of each feather yellowish white; the neck in front has the feathers yellowish white, deeply margined with brown and yellowish brown; the nape wants the plume. Chin, throat, and breast, yellowish white, the feathers deeply margined with yellowish or greyish brown, forming elongated spots; back, deep brown, with angular yellowish white streaks on the centre of the feathers. Greater wing coverts, deep brown, with triangular-shaped spots of whitish on their tips; lesser wing coverts, deep brown, with angular whitish streaks on the centres of the feathers; primaries, also deep brown, with triangular-shaped spots of white on their tips; secondaries and tertiaries, deep brown, tipped with pale brown. Tail, greyish brown; upper tail coverts, a mixture of grey and two shades of brown; legs and toes, yellowish green, or yellowish brown; claws, dark brown.

Selby observes, 'As the bird proceeds to maturity, it acquires at each successive moulting a plumage approaching nearer to that of the adult; and in these intermediate stages, has been described as constituting different species, by various writers.'

John Gatcombe, Esq., of Wyndham Place, Plymouth, has obliged me with a very beautiful drawing of this species, but it did not arrive quite in time for the use of this work.

UNIV. OF
CALIFORNIA

BITTERN.

BITTERN.

COMMON BITTERN. MIRE DRUM. BITTER BUMP. BOG BUMPER.

Botaurus stellaris, SELBY.
Ardea stellaris, PENNANT. MONTAGU.

Botaurus. Bos—A Bull. *Taurus*—A Bull. *Stellaris*—.....?

THE Bittern visits some parts of Russia, Siberia, and Denmark, and Scandinavia generally; and in a southerly direction, France, Spain, and Italy, Galicia, Hungary, and Holland. In Africa, it is known in Barbary, and, it is said, at the Cape of Good Hope; also in Asia, in Japan, the Dukkun, and other parts of India, and in China and Tartary.

In Yorkshire the Bittern has been met with a few times near Sheffield, and near Huddersfield, but very rarely; one shot at Dalton, several in 1830; one at Whortley Park, several between that place and Pontefract; others near Leeds. It used to frequent Askham Bogs, near York, but is now scarce, though occasionally pretty abundant. In 1837, about a dozen passed through the hands of Mr. Henry Chapman, bird-stuffer, of York; and in 1831, twenty-five specimens were brought to Mr. Hugh Reid, of Doncaster. Fifteen were shot near that town in one year. No doubt before the drainage of the Cars, the outskirts of the famous level of Hatfield Chase, the birds were common in that district; but at present only a single one is occasionally seen. Upwards of sixty were ascertained, by Mr. Thomas Allis, to have been killed in the county in that year, in which they were unusually abundant all over England. In the month of December, eight were obtained in the neighbourhood of

Carlisle, in Cumberland; only one having been met with there in the preceding ten or twelve years. In Somersetshire, in the same year, the winter of 1830-31. In Hampshire, in Denny Bog, in the New Forest.

The Rev. Leonard Jenyns, in his 'Observations on the Ornithology of Cambridgeshire,' published in 1826, says that Bitterns were then met with in Burwell Fen, and occasionally on the moors near Cambridge, but appeared to be getting more scarce every year. Formerly they were plentiful.

They have also not unfrequently been met with along the low flat shores of Kent and Essex, in the reed beds and marshy grounds along the banks of the Thames. One at Walthamstow, in the latter county, in the month of January, 1850. It was common formerly, says the Rev. R. P. Alington, speaking of Lincolnshire, but this doubtless implies that it is not so now: Manton Common, and Twigmoor, near Brigg, in the same county, are mentioned by Sir Charles Anderson, Bart., as having formerly been favourite localities. In Lancashire, a male bird was shot at Thelwall, near Warrington, on the banks of the Mersey, on the 12th. of January, 1854. In Cornwall, specimens have occurred at Penryn Creek, Swanpool, Pennance, and other places near Falmouth. One, a female, was shot at Swanscombe, near Gravesend, Kent, Mr. W. C. Cooke informs me, and also one at Horning, Norfolk, December 30th., 1853.

In Derbyshire, one, in 1837, frequented the margin of the Trent below Swarkeston Bridge; one was shot formerly on the same river; and J. J. Briggs, Esq. saw one also at the cliff, near Weston, in September, 1838. In Norfolk they have been not unfrequent, and must formerly have been plentiful; their numbers appear to have been added to in the winter months by occasional migratory arrivals. In Surrey, it has occurred near Godalming, and at Kew Bridge, in January, 1854. One also at Jessop's Eyot, near Chiswick, Middlesex, on the 7th. of the same month.

In Scotland, some have been obtained, especially in the southern part, in the winter of 1830-31, when several were brought to Sir William Jardine, in Dumfriesshire. In Sutherlandshire they are rare; Charles St. John, Esq. has heard it at Shinness, near Loch Shin.

Wallace, in his 'Account of Orkney,' states that the 'Bittern hath been seen in this country;' but Dr. W. B. Baikie and Mr. Robert Heddle, in their very complete 'Historia

Naturalis Orcadensis,' say that since then they have met with no record of its appearance in the islands.

Bitterns occasionally breed in this country, and some on the other hand remain throughout the winter, but for the most part it would appear that they are migratory, arriving in March and April, and departing in September and October. Thomas Eyton, Esq., of Eyton, in his 'Fauna of Shropshire,' mentions a hatch of these birds as having come off at Cosford Pool, in that county. Another pair built at Tonglake, near Albrighton, also in Salop. An egg was once obtained at Ranworth, in Norfolk. In Ireland, too, the late William Thompson, Esq., of Belfast, has said that some breed in the most extensive bogs, and are occasionally met with elsewhere, but that the birds are becoming gradually more scarce.

During the day they conceal themselves among the flags, rushes, reeds, and other rank vegetation that prevails in the damp districts, which afford them security and shelter—those wild plants that grow by the side of the lazy pool, and those that adorn the bank of the sequestered stream 'that whimples doon the glen.' At times they are found in woods. They are formidable if attacked at close quarters, the sharp bill giving hard and severe blows. To defend themselves against a dog, they will throw themselves on their backs, and strike with their claws as well as with their bill, both weapons of considerable power. They were formerly in some estimation as an article of food for the table, especially the young, and even still command a good price. They were also in esteem in falconry, as their habit is, when flown at, to rise high in the air, ascending in spiral circles, endeavouring to keep above their enemy. Selby adds, 'Should this manœuvre fail, it then prepares for the descent of the Hawk, by setting its sharp bill perpendicularly upwards, upon which its impetuous antagonist frequently transfixes itself, or is so severely wounded, as to be obliged to give up a second attack.'

They are of solitary habits, and while lying close in their quarters, the head resting upon the shoulders, bent back somewhat in the shape of the letter S, will frequently allow themselves to be almost trodden upon before they take wing or endeavour to escape. Their usual position is 'couchant,' with the body erect, and the head, neck, and bill pointed upwards.

Bewick says that the Bittern, when attacked by the Buzzard, or other birds of prey, defends itself with great courage, and

generally beats off such assailants. They are sometimes met with at a distance from water; thus Meyer mentions one shot on Burwood Common, near Walton, Surrey. They rarely perch in trees, but do so sometimes on their first arrival as a means of shelter. More than one pair are seldom found in one swamp, unless it is of very large extent. They cannot be rendered tame, though they may be kept a few years in confinement. If approached in their native fastnesses, they lie immoveably still as long as it seems possible to succeed in escaping observation or molestation, and if a person walks round one, it turns itself as if on a pivot, without otherwise moving, facing the intruder continually.

Meyer observes, 'The manner in which the Bittern moves its long neck is very remarkable: owing to the profusion of loose feathers all down the neck, it is not visible how the long neck is folded up in drawing it close to the body, and extending it again immediately. When the neck is drawn close to the body, and the head and beak lie in an horizontal line on its back, the whole bird looks a clumsy thick lump of feathers; and it may well startle any one who has never met with a Bittern in a wild state, to see it lengthen itself on a sudden, when in the act of flying up. The attitude in which the Bittern shews itself to most advantage is when it is in a passion, or under great excitement from fear; under such circumstances it faces the danger with half-open wings, and holds the tip of the beak in readiness for the onset, while the loose plumage of the neck is raised, and the head feathers erected so as to form a perfect circular crest. The eyes of its opponent, whether man or beast, are then the usual aim.'

'It is very remarkable how the Bittern disentangles itself from among the strong thick rushes, so as to gain room to open its wings. The way in which this is managed is by grasping the rushes with its long toes, and thus climbing to the more pliable foliage of the plantation.'

They do not fly far at a time, if disturbed, and then at a dull and flagging pace. They walk slowly, and with much apparent caution.

They seek their prey, which consists of small animals, moles, shrews, mice, and others, birds, fishes, leeches, lizards, snakes, frogs, beetles, and other insects, by night. Sir William Jardine has known a Water-Rail devoured whole by one, and Mr. Yarrell found in another the remains of a Pike, of

considerable size, and in another, a Water-Rail whole and six small fishes, and Mr. Blyth in another the remains of other fish and some large coleopterous insects.

The Bittern's boom, for so is its note called, is supposed to resemble the bellowing of a bull, from whence the duplicate name it bears. It somewhat resembles the word assigned to it. It is uttered in the spring, the season of courtship, and is no doubt as sweet to the ear of the mate, as the most rich thrilling quaver to the enamoured nightingale, or the softest cooing to the gentle dove. Mr. Yarrell says, that when roused at other times, the bird makes a sharp harsh cry on rising, not unlike that of a Wild Goose, and in flight, but only during the night, a 'craw, craw.' The sound produced by the Bittern, is so peculiar and strange, that it has given rise to various superstitions, which have borrowed adventitious charms of alarm from the lonely places in which the note is for the most part heard. 'The common people are of opinion that it thrusts its bill into a reed that serves as a pipe for swelling the note above its natural pitch, while others imagine that the Bittern puts its head under water, and then by blowing violently produces its boomings. It begins its call in the evening, booming six or eight times, and then discontinuing for ten or twenty minutes, it renews the same sound.' The Bittern commonly booms while soaring high in the air with a spiral flight.

The nest is made of sticks, reeds, and other rough materials, and is generally placed on the ground, in the thickest part of the vegetation, not far from the water's edge. Dr. Thieneman says that the bird is careful to put it upon a mass of fallen reeds and prostrate rushes, so as to be beyond the effects of any temporary rising of the water.

The eggs, which are of a similar shape at either end, are from three to four or five in number, and of a uniform pale brown colour. The female sits on them, and the male brings her food while thus engaged. The young are soon able to shift for themselves.

Male; the bill, sharp on the edges and pointed, is greenish yellow, the upper mandible varied with dark horn-colour towards the point; from the base on each side proceed large longitudinal streaks of dark brown and reddish brown; iris, yellow; under it descends a streak of rich deep brown. Head on the crown, which is somewhat depressed, black, tinged with metallic green and purple; the feathers at the

back of the head varied with cross bars of black and pale buff, the latter colour on the tip, itself again minutely edged with black; sides of the head, brownish buff. Neck on the sides, brownish buff, with narrow transverse lines of dark brown; the feathers are lengthened and fold over the back part, which is only covered with thick down; they are also capable of being set forward, and then assume the appearance of a ruff; neck on the back, and the nape, rich brownish buff, irregularly marked with black and dark reddish brown. Chin, pale buff white; throat on the centre, pale brown; the breast has the feathers blackish brown in their centres, broadly margined with buff, the lower part buff with narrow and some wider streaks of dark brown. Back, yellowish brown buff on the centres of the feathers, forming streaks, the outside edges black.

The wings have the four first feathers of about the same length, and, at the same time, the longest in the wing; primaries, mottled with greyish or brownish black and chesnut brown, darker red than on the body. Tail, reddish brown, darker red than on the body, variegated with black; it is composed of ten feathers and is very short. The legs, which are thick, short, and feathered down to within half an inch or three quarters of an inch of the knee, are as the toes—pale green; the latter are very pliable. The claws, which are very long and sharp, pale horn-colour, the middle one pectinated.

The female differs in no essential respect from the male.

The same remark applies to the young of the year. At first they are covered with an orange yellow down.

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LITTLE BITTERN.

LITTLE BITTERN.

BOONK. RUFOUS BITTERN. LITTLE HERON.
LITTLE BITTERN HERON. LONG-NECK.

Ardea minuta,	Linnæus. Leach.
" *danubialis*,	Gmelin.
" *soloniensis*,	Gmelin.
Ardeola minuta,	Prince Buonaparte.
Cancrophagus minutus,	Kaup.
Butor minutus,	Swainson.
Botaurus pusillus,	Brehm.
" *minutus*,	Boie. Eyton.

Ardea—A Heron. *Minuta*—Small—minute.

This bird belongs to the southern parts of the European continent—Turkey, Italy, Greece, France, Spain, and Holland. In Sweden it has been met with, though but very rarely: in Switzerland it is annually observed, and some few, according to M. Necker, stay to breed. In Asia it is plentifully distributed about the Black Sea and the Caspian Sea; in Persia, Syria, and Arabia. In Africa it is also met with—in Barbary, and so far south as the Cape of Good Hope; likewise in Madeira.

In this county, Yorkshire, one was procured near Redcar, which is on the sea-coast, on the 20th. of September, 1852; one at Birdsall, near Malton, the seat of Henry Willoughby, Esq., about the year 1842; one at Thorpe, near Burlington, the seat of A. W. Bosville, Esq.; and one near Doncaster. In Dorsetshire, one in 1851, at Preston, near Weymouth, and one at Lytchet Maltravers. A young bird was bought in the Leadenhall Market, London, and is now in the collection of British Birds in the British Museum. One was shot in April, 1852, in the parish of Oving, in the county of Sussex, as Mr. George Jackson informs me. Another was run down and captured by some men, in the neighbourhood of Plymouth, a few years since, in the spring; one in

Cornwall. One, a female, was shot near Guildford, in Surrey. In Norfolk, one, a male, at South Waltham, on the 11th. of June, 1849, where, according to Mr. Yarrell, on the authority of Mr. Heysham, of Carlisle, a pair had been shot about the beginning of July, 1839; one at Lowestoft, a female, in June, 1830; one at Barnaby, and one at Ludham.

Also in Berkshire, one, in the summer of 1826, on the banks of the Thames, near Windsor; one at Uxbridge Moor, in Middlesex; one in Herefordshire, at Shobden Court, the seat of Lord Bateman, in the spring of 1838; one also in South Wales. At Somerton, one, also a male, a young bird, on the 17th. of May, 1852; in Shropshire, one, at Shrewsbury, on the banks of the Severn. In Northumberland, one, at Blagdon, the seat of Sir M. W. Ridley, Bart.; and one near the mouth of the Tyne. In Devonshire, one, in the summer of 1808; in Somersetshire, one, near Bath, in the autumn of 1789, and another near the River Creed.

In Orkney, one was killed in the Isle of Sunda, in the winter of 1805-6.

In Ireland, one has been recorded by the late William Thompson, Esq., of Belfast, as having been shot in the county of Armagh.

It is of migratory habits, moving northwards the latter part of April, and returning southwards in September.

It is adapted in its modes of life to the wooded swamps that border on rivers, lakes, ponds, and inland seas, among which, where reeds or other aquatic vegetation flourishes, it has its habitation. It frequently perches on trees, especially in the spring of the year. Selby says that its usual position on the ground, when at rest, is that of sitting on the whole length of the leg, with the neck bent, the head thrown back, and the bill pointing almost perpendicularly upwards. Meyer observes, 'It is a matter of surprise how the Little Bittern puts in practice one of its habits, namely, that of climbing or running up and down a perpendicular branch of a tree, with as much ease as if it walked on the ground. The necessity of placing its feet in a line, makes the circumstance unavoidable of crossing its legs at every step, while the formation of its feet is apparently adapted only for the purpose of wading. The length and pliability of the toes, and the arched and sharply pointed claws, materially aid this bird in retaining its hold.

The Little Bittern is very artful in keeping itself out of

sight, and also in deceiving the greater number of its enemies, when in an unsheltered spot, by placing itself in a stiff, unnatural position when it perceives the approach of danger, in which it remains so immoveable and for so long a time, that when it is at last obliged to take wing, it flies up with such unexpected noise that the sportsman is generally too much taken by surprise to avail himself of the opportunity of firing, until the bird has attained too great a distance to be shot; and when concealed among reeds, rushes, or other herbage, it is with the greatest difficulty that it is made to start; and to effect this purpose frequently requires much caution and perseverance. The best time to get a sight of the Little Bittern is towards the evening, owing to its habit of coming forth of its own accord at that time; but to reach, unperceived, a hiding-place for the purpose of lying in wait, the greatest caution is required when approaching the spot supposed to be frequented by this species.

The flight of the Little Bittern is different from that of others of its family, being performed with stronger and quicker motions of the wings. It does not fly high in the air during the day, but only high enough, in general, to clear the vegetation among which it resides. When in the act of taking flight, this Bittern flutters quickly with its wings; but when alighting it throws itself, as it were, to the earth; only breaking its fall when close to the ground, by expanding the wings.'

This species, as just shewn, is a good climber, and ascends upright objects with great ease. It walks about, Audubon says, with the head drawn closely in, and without shewing any portion of the neck.

The bird is capable of being tamed, especially if taken young, but only with much trouble. It is described as being very amusing, assuming various grotesque attitudes. It is bold, fierce, and courageous, and quick in its movements. If attacked it defends itself ably with its pointed beak, aiming at the eyes of its assailant, or other undefended parts—'unde nisi intus datum?' It is capable of being kept in confinement.

The Little Bittern feeds by night, and remains still during the day in the cover afforded by the water plants that grow in the situations which it frequents. Its food consists of fish, frogs, and other reptiles, to which some have added molluscous animals and insects; indeed, Audubon says, that tame ones are

very expert in catching flies. The young birds are fed with food from the crops of their parents, which the latter are said to place on the edge of the nest. 'If the young brood continue undisturbed they remain long in the nest, but if they are molested they hurry out and cling to the rushes, being fully capable of climbing up and down in the same manner as the parent birds. As soon as the young can help themselves the parents leave the breeding-place, and are no more seen in the neighbourhood for the remainder of the season. While the female sits on her eggs she can hardly be driven away, and remains not only close to the spot, but runs up and down the rushes in the greatest excitement, continually uttering her alarm note, while the male bird watches the scene from his hiding-place.'

The note is a harsh croak; that which expresses alarm being likened, by Meyer, to the word 'gaek,' repeated two or three times. Viellot compares it to the barking of a large dog, when heard at a distance.

The nest is generally to be found where flags grow, sometimes near, but at other times farther off from water. It is placed on hummocks in the marshes, or on strewed reeds or flags, a little above the usual rise of the water, and in some instances on the low boughs of an overhanging tree: a few have been found in bushes about a yard from the ground. It is made of such materials as the dry twigs of the willow, grass, reeds, rushes, and flags; and is a shapeless structure.

The eggs, four and occasionally five, in number, or even six, according to Mr. Hewitson, are of a pale whitish green colour. Their incubation occupies sixteen or seventeen days.

Male; length, one foot one or two inches; bill, rich yellow, the point dusky; iris, bright yellow, over it is a yellow streak. Head on the crown, black, reflected with green or blue; neck on the back and sides, dull yellowish buff, tinged with lilac purple; on the lower part of the neck in the front the feathers are elongated on the sides, and at that part a few of the feathers have dark centres with buff-coloured margins. Nape, almost bare of feathers, but those of the sides of the neck passing obliquely backwards and downwards cover the otherwise bare space; chin, white; throat, pale dull yellow. The breast has the loose feathers dull yellow, tinged with violet, some of them margined with dusky and rich brownish yellow; below, the breast is yellow; back, black, with green reflections.

The wings have the first three quill feathers very nearly equal in length, and the longest; the axillary plume is white; greater and lesser wing coverts, dull yellowish buff; primaries, dusky, or greyish black; greater and lesser under wing coverts, white, or pale buff. Upper tail coverts, black, with green reflections; under tail coverts, whitish; the legs are clothed with feathers to, or nearly to, the knee joint; the unfeathered part and the toes, light yellowish green; the soles yellow; claws, dusky; the middle one is serrated on the inner side.

Female. John Henry Gurney, Esq., and William Richard Fisher, Esq., of Yarmouth, in their 'Account of the Birds found in Norfolk,' observe, 'From an inspection of the specimens obtained from time to time in this district, we incline to the opinion, that if the females of this species ultimately arrive at a plumage similar to that of the adult males, as is asserted by modern naturalists, it is only at a much more advanced period than that at which the same plumage is assumed by the latter; and it appears quite certain that the female, in the supposed immature plumage, pairs with the adult male.'

The young in its first plumage, while yet some of the down remains upon it, has the head on the crown dark brown; the feathers of the neck white at the base, pale yellowish brown towards the end, with a streak of dark brown in the line of the shaft, which dark marks wear out by degrees. Breast, pale buff, with long streaks of dusky brown in the line of the feathers, which also gradually become obliterated; back, dark brown, with buff-coloured edges to the feathers, which are lost as the bird advances in age. Greater and lesser wing coverts, buff; primaries, greyish black; tertiaries, reddish brown; greater and lesser under wing coverts, pale buff white. Tail, greyish black, the outer web of the first quill feather chesnut; under tail coverts, pale buff white. Legs, toes, and claws, reddish brown. In the young bird, in the more advanced stage, the bill is yellowish brown. The crown is blackish green; neck on the sides reddish brown; in front, yellowish brown. The throat has a spot of white on each side; breast above, deep red brown, with a glossy lustre, the feathers margined with yellowish white; below, yellowish white, streaked with brown; back, chesnut brown; the feathers margined with yellowish white. Tail, blackish green; legs, pale olive brown.

The plate is taken from a beautiful drawing by John Gatcombe, Esq., of Plymouth.

AMERICAN BITTERN.

FRECKLED HERON. MOKOHO BITTERN. DUNKADOO.

Ardea minor,	WILSON.
" *lentiginosa*,	MONTAGU. LEACH.
" *mokoho*,	VIELLOT.
" *stellaris*, var.,	LATHAM.
Botaurus freti hudsonis,	BRISSON.
Butor americana,	SWAINSON.

Ardea—A Heron. *Minor*—Lesser.

THE native country of this species of Bittern is indicated by its name. It is a native of the whole of North America, and occurs in plenty in the Fur Countries, regions which for true sporting are to be preferred to any others in the world, even to the jungles of sultry India, or the vast and rarely-trodden wilds of the distant interior of Southern Africa.

Of these birds Mr. Yarrell speaks of one as having been met with in the Isle of Man; one in Cornwall; one in Hampshire, near Christchurch, in 1836; one in Devonshire, shot at Mothecombe, near Plymouth, December 22nd., 1829; and one, the specimen recorded by Montagu, shot by a Mr. Cunningham, in the parish of Piddletown, or Puddletown, near the River Froome, in the county of Dorset, in the autumn of 1804.

These birds are sold in the markets of New Orleans as an article of food, though of inferior estimation, to make gombo soup, a composition of the 'cuisinier' with which I am not acquainted. When fat, however, they are said by Wilson to be excellent eating.

The flight is said to be rather rapid.

It feeds on fish and frogs.

AMERICAN BITTERN.

TO VIEW
ANIMALS

Its note, a loud booming, is considered to be represented by two of the names applied to it as vernacular ones—Mokoho and Dunkadoo. Dr. Richardson says that it may be heard every summer's evening, and also frequently in the day. When disturbed, it utters a hollow, croaking cry, compared by Mr. Cunningham to the tapping of a drum.

The nest is made in swamps.

The eggs are described by Hutchins as of a uniform dull olivaceous tint.

Male; length, about two feet three inches; bill, brownish yellow, the upper mandible dark brown along the upper ridge at the point; iris, yellow, over it and from the forehead, before and behind it, is a streak of light yellow brown. Head on the crown, brown, tinged with red; back of the head and neck on the back, brown; nape, bare of feathers; down the side of the neck is a descending streak of black. The loose elongated feathers of the front and sides of the neck down to the breast are brown along the centre, bounded by a darker line, and with broad edges of pale buff. Chin, white; throat, a mixture of white, buff, and dark brown in streaks. Breast, buff, each feather with an elongated patch of brown on its centre, forming zigzag pencillings, but more distant and finer than those on the upper parts. Back, rich brown, the centre of each feather the darkest and most uniform in colour, the edges freckled with darker brown on a ground of yellowish brown.

The wings have the first three quill feathers nearly equal in length, and the longest in the wing. 'The first quill feather differs in form from the second and third, being remarkably pointed at the end, while the second and third are rounded.' Greater and lesser wing coverts, rich brown, the centre of each feather the darkest, and most uniform in colour; the edges freckled with the darker brown on a ground of yellow brown. Primaries, except the three first, brownish black, tipped with chesnut, which is also freckled with brownish black, the shafts black; secondaries, also brownish black, tipped with chesnut, which is likewise freckled with brownish black, the shafts black; tertiaries, freckled with dark brown, reddish brown, and buff. Tail, almost uniform reddish brown; upper tail coverts, buff, freckled with two shades of brown; under tail coverts, uniform buff. Legs and toes, greenish brown; claws, darker, approaching to horn-colour; the middle toe pectinated.

The young are said to be at first black.

WHITE STORK.

Ciconia alba, Fleming. Selby.
Ardea ciconia, Montagu. Bewick.

Ciconia—A Stork. *Alba*—White.

The winter quarters of the Stork are Egypt and other northern parts of Africa; and its summer haunts, the southern countries of Europe—France, Holland, Germany, Turkey, Spain, Poland, and southern Russia, some advancing as far north as Sweden, and other districts of Scandinavia and Siberia. Its eastern range extends through Asia to Japan.

Sir Thomas Browne has recorded that he used to notice these birds occasionally in the fens, and that some had been shot in Norfolk, in the neighbourhood of Norwich and Yarmouth. Wallis, in his history of Northumberland, mentions one shot near Chollerford Bridge, in the year 1766. One was shot a few miles from Buckingham, in the month of September, in the year 1846, of which James Dalton, Esq., of Worcester College, Oxford, obligingly informed me; and N. Rowe, Esq., also of the same College, of another shot at Topsham, Devonshire, on the estuary of the Exe, on the 28th. of July, 1852.

The following specimens are also on record as having occurred:—In Wiltshire, one, near Salisbury; in Kent, one near Sandwich, and one in Romney Marsh. In Suffolk, one, near Mildenhall, in 1830. The late Frederick Holme, Esq., of Corpus Christi College, Oxford, asserted that four or five haunted some pools on Kexby Common, in the East Riding of Yorkshire, for some time, in the spring of 1830, and that one of them was shot. About the year 1825, one was killed at Bawtry, in that county; and about the year 1829,

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a flock was seen on the Trent, two, supposed to belong to which, were shot, also near Bawtry. In March, 1831, one was shot at Bretton Hall, near Barnsley, the seat of Thomas Wentworth Beaumont, Esq. Other instances, I believe, have occurred. One was shot on the sea-shore near Skipsea. A bird also, that appeared to be of this species, was seen below Wansford, in the parish of Nafferton, near Driffield, in the spring of 1846, by E. H. Reynard, Esq., and — Fife, Esq. In Hampshire, one was obtained at Little Park, near Wickham. In Devonshire, three.

In Norfolk, a pair were shot in the Burgh Marshes, in the summer of 1817; another before that time, and one seen in the autumn of 1810, and one shot at Halvergate, May 11th., 1842. One, on Breydon, near Yarmouth, about the 15th. of March, 1851; and another was said to have been killed near Yarmouth, about the beginning of January, in the same year. One or two are killed in most years, generally in the spring months, and in the vicinity of the coast.

In Scotland it has occurred more than once. One was shot in the parish of Lonmay, near the Loch of Strathbeg, not far from the sea-shore, between Peterhead and Frazerburgh, in Aberdeenshire, in the winter of 1837-38.

In Orkney, a White Stork was caught in South Ronaldshay, in 1840, and kept alive for some time; being prevented from escaping by its wings being clipped, it used to keep company with a flock of tame geese.

In Ireland, it is also said to have been met with formerly; and three were seen near Fermoy, in the county of Cork, and one of them procured about the last week in May, 1846.

Who has not read of the Stork at the conflagration of Delft, which, after attempting in vain to convey away her young to a place of safety, remained with them and perished—a never-dying example of maternal devotedness. But the bird, indeed, must always have been noticed for the like feeling, from thence its name, one and the same with the expressive word 'Storge,' natural affection—the innate impulse which the Almighty Author of Good has implanted in every living creature, whether developed more or less ostensibly to man, and in many cases in a degree which even man himself does not and cannot exceed.

The Stork is in much esteem in the countries where it is plentiful as a destroyer of reptiles and vermin, and as a 'Sanitary Commissioner' is of great use and efficiency, by the

removal of all sorts of otherwise obnoxious and deleterious substances.

This bird, conscious, as it were, of its usefulness, and relying on its immunity from harm, walks about with fearless confidence along the busy streets of the most populous towns, and forages for itself in the thronged market-places. Meyer says, 'A very curious anecdote was recorded some years ago in a German newspaper, which strongly illustrates the wonderful parental affection of this species for their young. A house, on the top of which was a Stork's nest, containing young birds, took fire. In the midst of the conflagration, the old birds were seen flying to and from the nest, and plunging into a neighbouring piece of water, in which they soaked their feathers, and returning again and again to the nest, sprinkled the water over their young in such abundance, that they not only preserved their young ones, but saved from destruction that part of the building on which the nest was situated.'

'There is a great deal of tender attachment manifested by the Stork towards its mate and young brood, which extends itself to its protectors and keepers when in a state of confinement or domestication. But if a bird of this species is ill-treated or insulted, it will revenge itself on the first opportunity; and if hurt, it will fight manfully, and stand to its cause with its life. The blows of the powerful beak of the Stork are not to be trifled with, and are generally well directed and dangerous; the eyes of its antagonist being aimed at with great precision.'

Selby writes, 'Previous to the autumnal migration, which, in Europe, happens the last week in August or the beginning of September, these birds congregate in immense flocks, and, as if to try the strength of pinion of the recently-produced brood, make several short excursions, and are much in motion among themselves. After these trials of capability, they suddenly take flight, rise high into the air, and wing their way with great swiftness to the distant climes in which they pass our hyemal months; and where, it is said, they sometimes produce a second brood.'

Storks, as may be supposed, are easily to be kept in confinement. In Holland they are treated with even superstitious attention, and are never molested or injured.

Their chosen localities are low and watery pasture lands, intersected by dykes and drains, or bordered by rivers, canals, and lakes.

'Cranes are not,' writes Bishop Stanley, 'like the Heron, stationary; but even in the countries to which they are most attached, are regular birds of passage; but so punctual in their coming and goings, that from the most remote times they have been considered as gifted with reasoning powers. The prophet Jeremiah, speaking of their knowledge, contrasts their instinctive obedience to their Creator's laws with the culpable departure therefrom by those on whom God had bestowed the higher gifts of reason and understanding. 'Yea, the Stork in the heaven knoweth her appointed times; and the Turtle, and the Crane, and the Swallow, observe the time of their coming; but my people know not the judgment of the Lord.'—Jeremiah, viii. 7.

So punctual is the arrival and departure of the various migratory birds, that to this day the Persians, as well as ancient Arabs, often form their almanacks on their movements. Thus, the beginning of the singing of the Nightingales was the commencement of a festival welcoming the return of warm weather, while the coming of the Storks was the period of another announcing their joy at the departure of winter. The expression, 'the Stork in the heaven,' is more applicable than at first appears, for even when out of sight, its pathway may be traced by the loud and piercing cries.

'In the middle of April,' says a traveller in the Holy Land, 'while our ship was riding at anchor under Mount Carmel, we saw three flights of these birds, each of which took up more than three hours in passing us, extending itself, at the same time, more than half a mile in breadth.' They were then leaving Egypt, and steering towards the north-east of Palestine, where it seems, from the account of another eye-witness, they abound in the month of May. 'Returning from Cana to Nazareth,' he observes, 'I saw the fields so filled with flocks of Storks, that they appeared quite white with them; and when they rose and hovered in the air, they seemed like clouds. The respect paid in former times to these birds is still shewn; for the Turks, notwithstanding their recklessness in shedding human blood, have a more than ordinary regard for Storks, looking upon them with an almost reverential affection.'

In the neighbourhood of Smyrna, indeed throughout the whole of the Ottoman dominions, wherever the bird abides during his summer visits, it is welcomed. They call him their friend and their brother, the friend and brother exclusively of

the Moslem race, entertaining a belief that wherever the influence of their religion prevailed, he would still bear them company; and it might seem that these sagacious birds are well aware of the predilection; for singularly enough, a recent traveller, who met with them in incredible numbers in Asia Minor, observed that although they built on the mosques, minarets, and Turkish houses, their nests were never erected on a Christian roof. In the Turkish quarters they were met in all directions, strutting about most familiarly, mixing with the people in the streets, but rarely entering the parts of the town inhabited by Greeks or Armenians, by whom, possibly, they may be occasionally disturbed. Nothing can be more interesting than the view of an assemblage of their nests. Divided, as they always are, into pairs, sometimes only the long elastic neck of one of them is to be seen peering from its cradle of nestlings, the mate standing by on one of his long slim legs, and watching with every sign of the closest affection.

At another Mohammedan town, Fez, on the coast of Barbary, there is a rich hospital, expressly built and supported by large funds, for the sole purpose of assisting and nursing sick Cranes and Storks, and of burying them when dead. This respect arises from a strange belief, handed down from time immemorial, that the Storks are human beings in that form, men from some distant islands, who, at certain seasons of the year, assume the shape of these birds, that they may visit Barbary, and return at a fixed time to their own country, where they resume the human form. It has been conjectured that this tradition came originally from Egypt, where the Storks are held in equal respect, as we shall see when we speak of their sacred bird, Ibis. By the Jews the former was also respected, though for a different reason; they called it Chaseda, which in Hebrew signifies piety, or mercy, from the tenderness shewn by the young to the old birds, who, when the latter were feeble or sick, would bring them food. This affection, however, appears to be mutual, for the parent birds have a more than ordinary degree of affection for their young, and have been known to perish rather than desert them.

Besides the Jews other ancient nations held these birds in veneration. A law among the Greeks, obliging children to support their parents, even received its name from a reference to these birds. By the Romans it was called the

pious bird, and was also an emblem on the medals of such Roman princes as merited the title of Pius.

Some hen's eggs were placed in a Stork's nest, and the others removed. The female Stork, not aware of the change, sat patiently the appointed number of days, till the shells were broken, and the young chickens made their appearance. No sooner were they seen by the old birds, than they testified their surprise by harsh notes and fierce looks, and after a short pause, they jointly fell upon the unfortunate chickens, and pecked them to pieces, as if conscious of the disgrace which might be supposed to attach to a dishonoured nest.

A French surgeon at Smyrna, wishing to procure a Stork, and finding great difficulty, on account of the extreme veneration in which they are held by the Turks, stole all the eggs out of a nest, and replaced them with those of a hen. In process of time the young chickens came forth, much to the astonishment of the Storks. In a short time the male went off, and was not seen for two or three days, when he returned with an immense crowd of his companions, who all assembled in the place, and formed a circle, taking no notice of the numerous spectators, which so unusual an occurrence had collected. The female was brought forward into the midst of the circle, and after some consultation, the whole flock fell upon her, and tore her to pieces; after which they immediately dispersed, and the nest was entirely abandoned.

The following, in many respects similar case, occurred on the estate of a gentleman of large landed property near Berlin, and is a valuable corroboration of what might, to many, appear unworthy of credit. A pair of Storks built a nest on one of the chimneys of his mansion; having a curiosity to inspect it, the owner climbed up, and found in it one egg, which, being about the size of a Goose's egg, was replaced by one belonging to that bird. The Storks seemed not to notice the exchange, but no sooner was the egg hatched, than the male bird perceiving the difference, rose from the nest, and flying round it several times with loud screams, disappeared, and was not seen again for three days, during which time the female continued to tend her offspring as usual. Early on the fourth morning, however, the inmates of the house were disturbed by loud and discordant cries in the field fronting the house, where they perceived about five hundred Storks assembled in a dense body, and one standing about twenty yards before the rest, apparently

haranguing its companions, who stood listening, to all appearance, with great emotion. When this bird had concluded, it retired and another took its place, and seemed to address them in a similar manner. This proceeding and noise was repeated by several successive birds, until about eleven o'clock in the forenoon, when the whole flock simultaneously arose in the air, uttering dismal cries.

The female all this time was observed to remain on her nest, watching their motions with apparent trepidation. In a short time the body of Storks made towards her, headed by one bird, supposed to be the male, who struck her vehemently three or four times, and knocked her out of the nest; the whole mass then followed the attack, until they had not only destroyed the female Stork, (who made no attempt to escape or defend herself,) but the young Gosling, and utterly removed every vestige of the nest itself. Since that time, about five years ago, no Stork has been known to build, or ever been seen in that neighbourhood.

The person who stated this singular anecdote was a gentleman of undoubted veracity, who had been visiting at the house and seen the preserved remains of the Stork and dead Gosling. It may be added, that in the part of Germany where this occurrence took place, there is a superstition prevalent that a Stork never builds on a bad man's house, and to such an extent is this notion carried, that if a man were suspected, even of murder, the people could scarcely be induced to bring him before the magistrates, if a Stork was known to build on his house. This is mentioned as one amongst other reasons why the gentleman permitted such, in some respects, troublesome birds to build on his chimney-top unmolested.'

The Stork, in the attitude of repose, always stands on one leg, with the neck bent, and the bill resting on the breast.

They feed on almost anything—small animals, young birds, water insects, reptiles, fishes, and worms. If they can, they wash the food they take from the ground, in water, before swallowing it. They may be seen stalking about in the fields, or standing on one leg by the river side, watching for some prey to come within reach.

They frequently make a loud clattering noise, by snapping the upper bill and the lower together with force and quickness. This sound is produced both in flight and when the bird is sitting on the nest. It is common to both the

male and the female, and is also taken up by the young as soon as fledged. A hissing noise is also emitted, especially by the young birds when in fear.

The periodical return of the Stork to the place of its nest, the home of its own youth, and in like manner of its ancestors for generation after generation, is well known. 'In various parts of Holland, the nest of this bird, built on the chimney top, remains undisturbed for many succeeding years, and the owners constantly return with unerring sagacity to the well-known spot. The joy which they manifest on again taking possession of their deserted dwelling, and the attachment which they testify towards their benevolent hosts, are familiar in the mouth of everyone.' 'In Holland particularly, in some parts of Germany, and indeed in all countries where it breeds, it is protected; boxes are provided for them on the tops of the houses; and in several continental cities, he considers himself a fortunate man, whose roof the Stork selects for its periodical resting-place.' Platforms and other artificial flat erections are also placed for them to build on.

A heap of sticks and twigs, with any other coarse materials, forms the nest. It is placed on the house top, the summit of some tall chimney, the steeple of a church, or an old tower, or turret; as well as on the highest parts of the loftiest trees, in the immediate vicinity of the most crowded thoroughfares.

The eggs are usually three or four in number; white, tinged with buff, and of a short oval form. The young are hatched after a month's incubation, and are attended to with sedulous attention by both parents, until fully fledged and able to provide for themselves. The old birds feed them from their own bills, with food they have previously swallowed.

Male; length, three feet six or eight inches; bill, red; iris, brown; the bare part round it black. Head, crown, neck, nape, chin, throat, breast, and back, pure unsullied white. Greater wing coverts, glossy black, shaded with grey towards the shafts; primaries, secondaries, and tertiaries, black. Legs and toes, red; claws, brown.

There is no difference in the plumage of the male and the female. Bill, in the latter, dark brownish red; legs and toes, dark brownish red.

In the young the black parts of the plumage are tinged with brown.

BLACK STORK.

Ciconia nigra, FLEMING. SELBY.
Ardea nigra, MONTAGU.

Ciconia—A Stork. *Nigra*—Black.

THE Black Stork is found in greater or less numbers in various countries of Europe, being not uncommon in Switzerland and some parts of Germany, abundant in Hungary and Poland, and very rare in France and Holland. It travels northwards as far as Finland, Sweden, and Russia, and is found also in Italy, in the salt marshes, and in Turkey. In Asia it occurs likewise in Siberia, and to the extreme north, as well as Persia, Syria, Ceylon, Java, and the neighbourhood of the Black Sea and the Caspian Sea; and likewise in Africa, at the Cape of Good Hope, and from thence to the Mediterranean and Madeira. Also in America, both on the continent and the Islands of the West Indies—St. Domingo and Martinique.

The following are the examples of this species that have occurred in England:—One, recorded by Colonel Montagu, shot on Sedge Moor, so fatal to other lives, in the parish of Stoke St. Gregory, Somersetshire, on the 13th. of May, 1814; one on the River Tamar, in Devonshire, in 1831; one shot in October, 1832, in the parish of Otley, near Ipswich, Suffolk; and one in the Isle of Purbeck, near Poole, Dorsetshire, on the 22nd. of November, 1839. One also in Yorkshire, on Market Weighton Common, in the East-Riding, by Mr. Wake, about the 29th. of October, 1852, as recorded in 'The Naturalist,' volume iii., page 19, by my brother, Beverley R. Morris, Esq. Another was killed on the Weald of Kent a few years since, as Mr. Chaffey, of Dodington, has been good enough to inform me.

BLACK STORK.

U. S. Soil Conservation Service

The Black Stork is a migratory bird, wending its way northwards in March, and southwards back again in September or October.

It gives a preference to secluded places, dwelling in remote, extensive, and impenetrable morasses and forests, interspersed with pools or streams, not only in low but in high situations, and by the banks of rivers, and it does not otherwise appear to be of a particularly wild or shy nature, and is described as being moreover of a mild and peaceful disposition, soon becoming docile in confinement and free from resentment. It frequently rests on one leg. 'It is an old tradition with regard to Storks, that they take care of and nourish their parents when they are too old to take care of themselves, from whence the Greek word 'pelargicos,' signifying the duty of children to take care of their parents; and 'pelargicoi nomoi,' signifying the laws relating to that duty, both derived from the Greek word for a Stork. 'Pelargos,' from 'pelas'—black, and 'argos'—white, alluding to the prevailing colours of the Stork.'

The adult bird is not sociable even with those of its own kind, and more than a single pair do not choose the same building place. If more than two are seen together at the time of migration, they will generally be found to be young birds of the year.

They roost on some raised spot, and in this quiescent state the neck is recurved so that the hinder part of the head rests on the back, and the bill is drawn in closely among the feathers of the front of the neck.

Fish and shell-fish appear to be its favourite food, but it eats frogs, snakes, and other reptiles, young birds, moles, worms, grasshoppers, beetles, and other insects, in fact almost anything. In searching for the first-named the bill is kept partly open. Mr. Yarrell says, recording the observations made on the one obtained by Montagu, which was kept more than a year, 'When very hungry it crouches, resting the whole length of the legs upon the ground, and supplicantly seems to solicit food by nodding the head, flapping its unwieldy pinions, and forcibly blowing the air from the lungs with audible expirations. Whenever it is approached, the expulsion of air, accompanied by repeated nodding of the head, is provoked.' They wade deep into the water in search of prey, which, when captured, they kill by shaking and beating with the bill before swallowing. They roost on a

tree at night, and a solitary bird will perch on one in the day-time when not engaged in search of food. They walk about in a sedate, slow, and cautious manner. 'When about to take wing, the Black Stork takes one or two short leaps; and when alighting it skims a short distance before touching the ground, and places its wing feathers in order before it moves on further.'

It makes a clattering sound by snapping the mandibles together.

It builds its nest, which is rather large, on the summit of the loftiest pine and other trees. The foundation of sticks is solidified by the addition of sods, the whole being finished with smaller twigs, rushes, feathers, hair, and all sorts of suitable lining.

The eggs, two or three or four, or even five in number, are of a buff white colour, faintly tinged with blue.

Male; length, three feet six inches; bill, red with a tinge of orange; iris, reddish brown, a bare space of the same colour surrounds it. Head, crown, neck, nape, chin, and throat, glossy black, with blue, green, and copper-coloured reflections. Breast, white; back, glossy black, bronzed with reflections of blue, green, and copper-colour, varying according to the light in which the bird is viewed. The greater and lesser wing coverts likewise exhibit a resplendence of glossy black, blue, green, and copper-colour reflected, the green shewing on the margin of the feathers; primaries, black. Tail, black; under tail coverts, white. Legs and toes, orange red; claws, black.

In very young birds the bill is dull green; the bare space round the eyes is olive green. The head, crown, and neck, reddish brown. The legs, olive green.

In the young in a stage advanced towards maturity, 'mutatis mutandis,' the bill is dusky red orange, brighter towards the tip. The iris is hazel; orbits, bright orange. The head, crown, neck, and nape, are described as being black or dusky brown, with purple reflections. Breast, white; back, brownish black, with paler margins to the feathers, and slightly glossed with green. Legs and toes, orange brown.

SPOONBILL.

SPOONBILL.

WHITE SPOONBILL.

Platalea leucorodia, PENNANT. MONTAGU.
" *nivea*, CUVIER.

Platalea. Platüs—Broad. *Leucorodia. Leucos*—White.
Rodia—.....?

THIS curious bird was formerly a regular summer visitor to this country, and built in communities.

In Europe, it is plentiful in Holland, Hungary, and the south of France; also in Turkey and Greece. It inhabits the more temperate parts of Russia and Norway, and appears to have been met with formerly as far north as Bothnia, Lapland, and the Ferroe Islands. In Asia, it belongs also to Siberia, and used to be noticed even beyond the Lake Baikal; also in Persia, in India, in the Dukkun, and in Syria; as likewise in the region between the Black Sea and the Caspian Sea. It is known in Africa to the Cape of Good Hope.

Spoonbills used formerly to breed in the county of Norfolk, as for instance at Claxton and Rudham. A flock were seen in the marshes near Yarmouth, in April, 1774, and several have been obtained in the same neighbourhood recently. In Yorkshire, one, I was informed, was shot near Masham; and Dr. Farrar obtained a specimen from Staincross, in July, 1833, but from the state of its wings he thought it must have escaped from confinement. One was shot at Wilberfoss, near Pocklington, in the East-Riding, on the 2nd. of August, 1831.

In Cornwall, in the year 1843, on the 13th. of October, a flock of eleven Spoonbills was observed to fly over Hayle, and four of them were shot at Gwithian, near St. Ives. One

was obtained near the Land's End, on the 8th. of October, 1845: it was an immature specimen. One also at St. Mary's, Scilly, the first week in June, 1850; one, also a young bird of the year, at Frensham Pond, Surrey, October 24th., 1844. One on West Sedge Moor, in the parish of Stoke St. Gregory, Somersetshire, on the 25th. of November, 1813; one at Lynn, in Norfolk, about the 23rd. of September, 1843; a flock occurred in the marshes in 1774; several were killed in the year 1808, and two or three are generally killed every spring on Breydon. In Dorsetshire several, one of them near Poole; some also in Devonshire. In Suffolk four, one of them at Aldborough, and the other three at Thorpe, out of a flock of seven. Two were met with in Lincolnshire, in 1826; they used to build anciently in that county at Trimley. Selby alludes to two killed in Lincolnshire. One, a male, on the Eremol River, near Nottingham, in 1833, as William Felkin, Esq., Jun., has written me word.

The species has occurred also in Worcestershire and Gloucestershire. In Kent, a flock of six frequented Sandwich Haven in the first week of June, 1850; one of them was shot near there, one, an old female, in the Wingham Marshes, and three were seen flying about in Pegwell Bay.

In Wales, one was procured near Aberystwith, in January, 1838. Two had been obtained near Holyhead, in the Isle of Anglesea, in the year 1832.

In Ireland, three were seen near Youghall, in the county of Cork, in the autumn of 1829, and one of them was shot.

Sir Robert Sibbald mentions it as an occasional visitor to Scotland, and he states that he also received it from Orkney. Dr. Fleming mentions one that was shot in Zetland.

The Spoonbill is easily tamed if taken when young, but in its wild state is shy and distrustful. Marshes, bogs, swamps, and low grounds moistened by pools and streams, are its natural haunts. It is pretty good to eat. To itself, when in confinement, nothing seems to come amiss.

They fly with the neck and legs both stretched out, and in standing the neck is commonly bent in the form of the letter S. In flight the wings are widely spread, and moved with regular flappings, but not very quickly.

It appears to collect its food by ploughing the water above the soft sand or mud from side to side with its spade-like bill, keeping it open till something comes in its way, or rather till it comes in the way of something. This with the neck

stretched out, and the whole body meanwhile turning from left to right, and from right to left, the bird advancing pretty quickly, and the mandibles being closed when taken out of the water. They thus, to quote the comparison made use of by some one who attempted a mathematical definition, 'concur like parallel lines meeting in one common centre.'

The food that they consume is of various kinds—small fish, reptiles, worms, leeches, shrimps, sandhoppers, tadpoles, grasses, and the roots of plants, and on these they feed by day, roosting at night.

This species also makes a noise by rattling its bill.

The nest is made in a tree, if one be situated conveniently for the purpose, or else on the stump of a willow, among rushes and weeds in water, or on the ground. It is put together of sticks, twigs, and rushes, and lined, if at all, with finer portions of the like; the former materials are made use of if it be placed in a tree. Several nests are built together, if trees for the purpose are in sufficient number.

The eggs, laid in the month of May, are sometimes four, but usually two or three in number. They are white, spotted with pale reddish brown: some are without the red spots.

The young, when hatched, remain in the nest until they are able to fly, when they are led by their parents to the nearest feeding ground, and are soon left to shift for themselves.

Male; weight, about three pounds and a half; length, two feet seven or eight inches; bill, black barred with lead-colour, except near the point, where it is yellow, faintly tinged with reddish; it is nearly seven inches long, rough at the base and on the upper surface, being furrowed transversely. Iris, deep carmine red; the bare parts about the head are yellow. The flowing feathers of the head are sometimes raised a little, and give the bird an elegant appearance; they are white in colour, but in old birds become tinged with orange yellow; the crown, neck, nape, chin, throat, and breast, are white, except a band of feathers over the upper part of the last named of a yellowish buff colour, which tint extends upwards on each side in a narrow stripe to the top.

The wings have the first quill feather not quite so long as the fourth, the second and the third equal to each other, and the longest in the wing, the fourth not quite so long. Greater and lesser wing coverts, primaries, secondaries, tertiaries, greater and lesser under wing coverts, tail, and upper and under tail coverts, white. The legs, which are six inches

long and without feathers half way, are black; toes, black, and connected together by a small web extending as far as the second joint of the outer, and the first joint of the inner one; claws, black. The webs are hollowed out on their front edge.

The female is rather less than the male, but otherwise she is of the same appearance, except that the crest is rather shorter, and the gorget on the breast is paler in colour.

In the young of nearly or quite the full growth, the bill is half an inch shorter than in the old birds; it is of a dark colour with a shade of yellowish red. Iris, at first whitish grey, subsequently brown; the bare parts about the head are paler than in the old bird; the occipital crest is wanting. The dorsal plumes are also absent.

IBIS.

IBIS.

GLOSSY IBIS. BAY IBIS. GREEN IBIS.

Ibis falcinellus,	FLEMING. SELBY.
" *ignea,*	STEPHENS.
Tantalus falcinellus,	PENNANT. MONTAGU.
Numenius viridis,	BRISSON.

Ibis—The Greek name of a bird. *Falcinellus. Falx*—A hook, from the shape of the bill.

THIS Ibis, though of a different species from that which, worshipped by the Egyptians of old, obtained thence the name of Sacred, appears to have been also regarded by them with some degree of veneration, as its remains are found with those of the other bird, preserved still, after the lapse of so many thousands of years, in the mummies of the catacombs.

In Europe, it occurs on its travels in the islands of the Archipelago of Greece, and in Sicily, Sardinia, Italy, Switzerland, France, Holland, Turkey, Hungary, Poland, and the southern parts of Russia. It is also included among the birds of Denmark, Norway, and Sweden, and has been seen according to Wagler, in Iceland. It belongs likewise to northern Africa —in Egypt, and again southwards, even to the Cape of Good Hope. In Asia, too, in India, in the Dukkun; in Persia, Syria, Thibet, and the districts between the Black Sea and the Caspian Sea, and in the islands of Sunda and Java, and others. Lastly, in America examples have, it is said, occurred; several in the United States, and in Canada, and in Mexico it exists in vast numbers, according to Audubon; as also in Florida, and the Brazils; but the Prince of Canino considers the species as a different one, and thinks that this continent has been wrongly given to the bird at present under consideration.

One was obtained in Devonshire, in 1839; in Norfolk, a pair were shot at the mouth of the Norwich river, September, 13th., 1824; there were four more in company with them: others have been met with in that county. Arthur Havers, Esq., of Tenterden, Kent, informs me of one killed near Reading-street, on the borders of Romney Marsh, in that county, in December, 1852; another was shot near Dartford, in 1837. In Surrey, one was procured on Whitemore Pond, near Guildford, in May, 1833; and Meyer saw a flock of birds which he believed to be of this species, pass over Fairmile Common, about the year 1837, in September.

In the 'Western Times,' of October 11th., 1851, it was recorded that a specimen of this exceedingly rare and interesting British visitor was shot at Holsworthy, in North Devon, a few days before the above date; it was on the 7th. of September; one also at Bridestowe, in October, 1835, and three others also elsewhere; in that county, two were formerly procured, as recorded by Montagu, and another in 1805. In Northumberland, one, shot on the bank of the Coquet, near Rothbury, in the autumn of 1820. In Lancashire, one; in Cornwall, several; in Dorsetshire, one, near Poole, in October, 1839. N. Rowe, Esq., of Worcester College, has also obligingly directed my attention to this instance of the occurrence of this very rare bird. One, of which Mr. M. C. Cooke has informed me, was shot in a pond at Swanscombe, in Kent; another, a male bird, nearly in adult plumage, of the occurrence of which Mr. John Shaw is my informant, was shot at Albrighton, Salop, October 3rd., 1853; another was in company with it at the time. Mr. William Franklin has also written to me of this specimen. Four or five were shot out of a flock in the Isle of Anglesea. In Berkshire, one.

In Ireland, one was met with on Lough Dun, in the county of Longford, about the 20th. of November, 1852.

The Ibis has its vernal and autumnal migrations, north and south, the former in March and April, and the latter in August and September.

They generally live in societies, and frequent the shores of lakes and ponds, the banks of rivers, and any moist places. They are wild birds, and not easily approached, both from this cause and the nature of the localities they inhabit.

'The flight of the Ibis is very peculiar, especially during its migration, when such numbers of them may be seen on the wing that they are rarely to be counted; and each flock

or flight moves on in a single string almost, that is to say, they fly side by side, and so close together as almost to touch the tips of each others' wings. When the numbers are great, the string forms a waving line; if not very numerous they keep a straight front. This peculiarity shews at once what birds they are, even if they fly too high to be in other respects distinguishable.' 'On the wing it is not only strong, but swift and graceful, its wings being expanded at full length, and moved with ease and in regular succession. Sometimes the bird will sail along for some distance, or soar in half circles: it flies generally very high, and when it alights, it flaps its wings quickly as it comes near the ground.' This quotation is from Meyer, who adds, 'When a flock intends to alight, the line becomes broken; on reaching the chosen spot, the birds fly in all directions, in great confusion, sailing about and alighting one after another in quick succession. It is equally beautiful to see the flock take wing in the same wild confusion; but in a very short space of time the line is formed and raised high in the air, during which the length increases by one bird after another taking its place right and left, and thus extending or increasing the line until they move off in this peculiar frontal line.'

They feed on small fish, crickets, beetles, and other insects, mollusca, worms, the fry of fish, frogs, and the lesser reptiles, small crustacea, and shell-fish, snails, and different water-plants. In search of such they wade deep, and sometimes swim a little on their way back.

The only note that appears to be uttered is a 'wrah,' and that when the bird is suddenly disturbed or alarmed.

The nest is placed among the 'debris' of reeds on some slight elevation, and is formed of dry grass, flags, and other such materials. Several nests are placed in proximity to each other.

The eggs are two or three in number, and of a very pale green colour. While the female is sitting, the male bird brings her food, and when not thus engaged, stands not far off, keeping sentry.

This is a bird of resplendent appearance, the metallic lustre which gilds the greater part of its plumage being exhibited in various lights to great advantage.

Male; weight, about eighteen ounces; length, one foot ten inches; the bill, in some specimens upwards of six inches in length, but in others considerably less, no doubt according to

the age of the bird, is blackish green, tinged with purple; the bare space from it to the eye is olive green, tinged with grey; a furrow extends along each side of the bill. Iris, dark brown; head on the crown and sides, deep greenish brown black, glossed with metallic purple; the feathers are narrow and pointed. Neck and nape, chin, throat, and breast, all deep rich reddish brown. Back above, deep rich reddish brown; below, blackish or brownish green, splendidly enlivened with glittering shades of purple and green as seen in different lights.

The wings, which expand to the width of two feet nine inches, have the first and fourth quill feathers equal in length, the second and third longer, the longest in the wing, and of mutual equal length. The wings underneath are dark brown. Greater and lesser wing coverts, dark red brown, with bronzed reflections of rich purple and green; primaries, dark brownish black, tinged with green; tertiaries, dark red brown, with brilliant green and purple reflections. The tail consists of twelve feathers, slightly forked when closed; they are of a blackish brown colour, richly tinted with iridescent purple and green; under tail coverts, dark brown. The legs, rather long and bare above the knees, are as the toes, blackish green; claws, dusky olive brown, and not much bent, the middle one brought to a sharp edge on the inside, and sometimes slightly but irregularly serrated.

There is little or no difference in the plumage of the male and female, the latter is rather less; weight, about sixteen ounces.

The young have at first a brown down; afterwards, before the first moult, the bill is greenish black, fading to brown towards the tip, and about five inches in length. Head, crown, neck on the back, and nape, pale brown, the feathers margined with white, giving a spotted appearance. On the throat are one or two narrow transverse bars, and a large irregular spot of white on a brown ground; the feathers edged with greenish reflections; breast on the upper part, brown, with greenish reflections on the margins of the feathers; back, glossy olive green, with faint changeable reflections of purple red. Tail and upper tail coverts, dull dark reddish brown. The whole plumage is at first without the glossy tints, which gradually afterwards appear. Legs and toes, blackish green.

UNIV. OF
CALIFORNIA

CURLEW.

COMMON CURLEW. WHAAP. WHITTERICK.

Numenius arquata,	PENNANT.
" *major,*	STEPHENS.
Scolopax arquata,	MONTAGU.

Numenius. *Numenia*—The New Moon, from the crescented shape of the bill. *Arquata*—Arched.

THIS fine bird well comports in its native demeanour with the wild places which it usually frequents, both upland and lowland, and more especially as regards the former.

In Europe, it inhabits Denmark, Sweden, and Norway, the Ferroe Islands, and Iceland. In Asia it has been received from Nepaul and China, and belongs likewise to Pondicherry, Japan, the Islands of the Eastern Archipelago, the country near the Caucasus, and Asia Minor, as also northwards even to Siberia. Specimens have also been procured in Southern Africa.

In Yorkshire, Curlews are sometimes seen on the moors in the neighbourhood of Halifax, Sheffield, and Huddersfield, and occasionally on those near Leeds and Hebden Bridge, as also near York and Doncaster. I have seen it near Burlington, where it also occurs.

In Cornwall it is described by W. P. Cocks, Esq. as not common in the neighbourhood of Falmouth. It is very plentiful in Norfolk. One was met with at Frensham Pond, near Farnham, Surrey. They still build near Holyhead; and on Wixham Moss, in Shropshire; also on some of the higher grounds in Cornwall; and in Devonshire, on Dartmoor, as they used formerly to do also on Exmoor. So they do moreover

in Northumberland on the hills. In like manner in Scotland, in Sutherlandshire and the Isle of Mull.

In Ireland, I have noticed them near Foaty, the fine place of James Smith Barry, Esq.; and they also frequent the shores of the River Lee, on the other side of the island, near Marino, the beautiful seat of Thomas George French, Esq., a distant connection of my family. They breed in some of the large bogs.

In Orkney it is common, and remains throughout the year.

Early in April they begin to leave their haunts by the sea, and to seek the far distant interior, in which for the summer months they will abide. Small flocks, of from five to ten, are generally seen thus passing through the interior, and larger numbers along the coast, the union of different flights which have come one after another.

The Curlew breeds in the most retired situations, and for the most part in hilly districts; on the lone wild heath, the solitary moor, the open down, and the barren sheep-walk, especially near places that are wet and marshy. It also frequents the sea-shores, the mud-banks and sand-flats of rivers, and the edges of lochs, both maritime and in the mainland. At times it perches on high trees. It walks well, and wades deep, and is able to swim with ease. It is a very difficult bird to approach, but may be enticed by a skilful imitation of its whistle. It is exceedingly good eating. It soon becomes tame in confinement, whether captured young or old, and will follow the person about that is accustomed to feed it. In the wild state they are very timid and shy, except when engaged with their nest, and are only to be circumvented by stratagem. In winter they are gregarious.

During migration, or in any more extended flight, either high over head, or close over the land or water, or even on their return from the mainland to the shore to feed, they advance in the shape of a wedge, and in the latter case if one such party be alarmed, a 'signal whistle' is given, which those that come after are guided by, and uttering it in repetition for those that follow, to be taken up again by them in turn, deviate to a safer track. If frequently thus disturbed they soon profit by experience, and resort to a different route.

Their flight, which is not very rapid, is executed with regular strokes of the wing, quickened if necessary according to circumstances. They alight somewhat suddenly, closing

the wings, and dropping nearly to the ground, then sweeping up once more a little, and then settling down. They often stand on one leg, or rest themselves by lying down.

They make their food in winter of small marine insects, crabs, and other minute crustacea; mollusks, worms, and other such; and when the flowing tide covers the sand where these are to be procured, they retire inland even to a considerable distance; but as soon as ever the ebbing waves have again retired back so far towards their fixed gaol as to leave the sandy margin again uncovered, back, almost to a moment, do the flocks return, taught by some sense which is out of the range of sight, but which 'He that planted the eye' has likewise implanted, as He has every other proper gift in His creatures, according to their several need. In summer they pick up flies and different insects, in addition to such of the other kinds of food enumerated here, as may then come in their way; and also bilberries, whortleberries, lichens, blades of grass, and the tender tops of twigs. They drink often, and are fond of bathing themselves.

The loud, clear whistle of the Curlew is exceedingly pleasant to such as delight in those retired scenes in which it is heard, and with which, as I have said, it so well harmonizes. It is uttered by the bird when on the wing, and its name I suppose has been considered to resemble it. It may be heard high in the air during migration, and also in the spring, at which season the male serenades his mate, rising slowly aloft, and wailing out his quivering cry. If an intruder approaches the nest, or its intended site, he is assailed by both birds, who dash at him with noisy screams, and beat about him within a few yards. They also, if driven to a distance and there followed, endeavour to entice their enemy away further by running and skulking in a deceptive manner.

The nest, if any be made in some slight hollow, consists only of a little dry grass, twigs, or leaves, or is placed in the middle of a tuft of the former, among heather or rushes.

The eggs, laid in April and May, are four in number, and they differ much both in their ground colour and the spots. They are of a pale dull green, blotted all over with two shades of brown. They are very large for the size of the bird. They are placed quatrefoil in the nest, the narrow ends inwards. The young run about almost as soon as hatched, but are not able to fly for a considerable time. Until then they are assiduously attended to by their parents. If

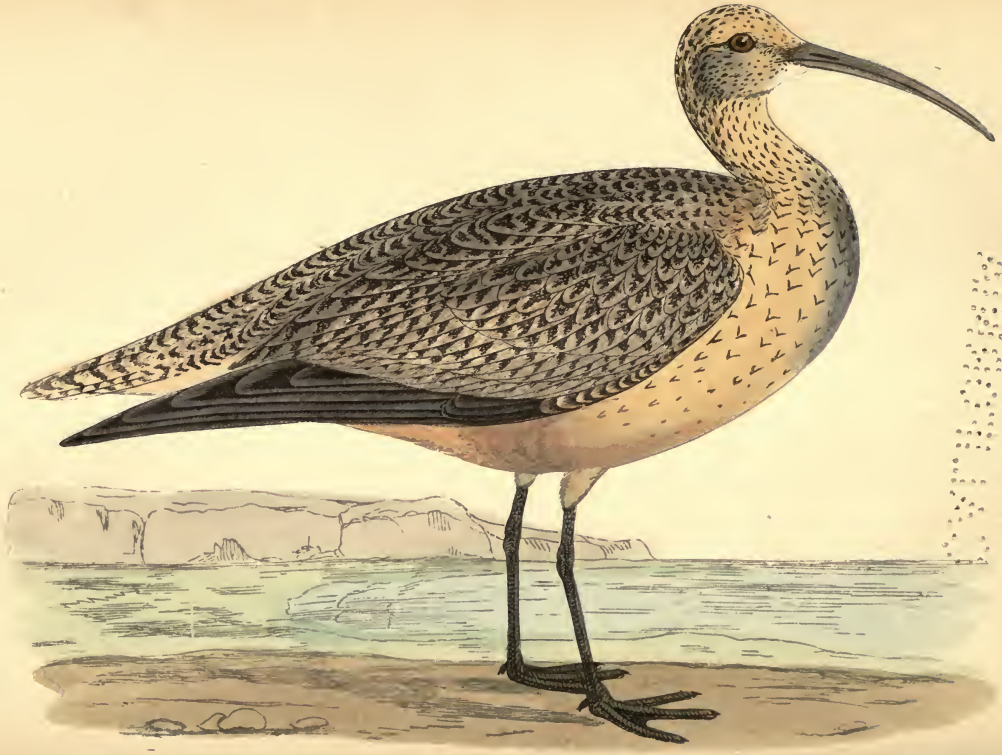
approached, they hide themselves among the inequalities of the ground, and lie very close, the old birds endeavouring the while to attract the enemy away.

These birds vary very considerably in size, as well as in shades of their plumage. Male; weight, twenty to twenty-two ounces, and upwards; length, one foot nine inches. Bill, dark brown, except the inner part of the lower one, which is paler, shading into yellowish red. It varies considerably in length—to six or seven inches. Iris, dark brown. Head, crown, neck on the back, and nape, pale yellowish grey brown, each feather streaked longitudinally with darker, the dark mark widest at the base; chin, white; throat, pale yellowish cream grey brown, streaked longitudinally with darker brown; breast above, yellowish brown; below, white, with spot-like streaks of dark brown. Back above, light dusky brownish black, slightly glossed with purple, with pale brown or greyish or yellowish white edges to the feathers; the lower part white, with the shafts of the feathers forming marked streaks.

The wings have the first quill feather the longest; the axillary feathers are barred, and sometimes clouded with brown. Greater wing coverts, black; lesser wing coverts, blackish brown, with almost white edges, and running into bars on the inner webs. The first five primaries, brownish black, glossed with purple, and with white shafts. The outer webs much darker than the inner ones, which are barred half across with white. Secondaries and tertiaries, blackish brown in the centre, and crossed transversely on the edges with dark and light brown. Tail, 'barry' of dark brown and dull yellowish white, the edges of the bars irregular, and often clouded and tinted with reddish white. Upper tail coverts, white, with a narrowed streak of dark brown towards the end; under tail coverts, white, with an occasional dusky streak. Legs and toes, pale bluish grey, or greenish lead-colour; the latter have a membranous edging on each side down to the claws.

Female; weight in some specimens as much as thirty-seven ounces. Length, from two feet one to two feet two inches.

The young are at first covered with yellowish white down, varied with spots and patches of brown.



ESQUIMAUX CURLEW.

ESQUIMAUX CURLEW.

Numenius borealis, NUTTALL. AUDUBON.
Scolopax borealis, WILSON.

Numenius. *Numenia*—The new moon, from the curved shape of the bill. *Borealis*—Of or belonging to the north.

THIS species of Curlew is a native of the northern parts of North America.

Its first occurrence as an 'addendum' to our British list was on the 6th. of September, 1855, when a specimen was shot by W. R. Cusack Smith, Esq., in the parish of Durris, in the county of Kincardine, Scotland, on the top of one of the mountains of the Grampian range.

These birds appear to migrate southwards by the beginning of August, returning to the north in the spring.

If pursued they are said to crouch close to the ground, even the head and neck being laid down. They congregate in dense flocks.

They fly in an easy manner, and run swiftly.

They feed on water insects and their larvæ, as also on the fruit of the cranberry.

The note, uttered on the wing, is a soft whistle, often repeated.

The eggs are three or four in number, and of a green colour, with a few large irregular-shaped spots of bright brown.

Male; length, about fourteen inches; bill, brownish black, the base of the lower mandible pale yellowish red; iris, dark brown, over the eye is a nearly white streak. Head and crown, brownish black, the feathers edged with reddish brown, on the sides yellowish brown with brown streaks; neck, light yellowish brown; the feathers edged with dull white, the fore part light brown with small longitudinal reddish brown marks. Throat,

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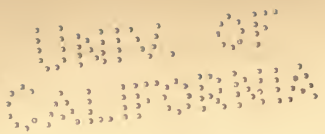
nearly white; breast, yellowish grey tinged with brown. Back, on all the upper part, blackish brown, relieved with light edges to the feathers, on the lower part dark brown with lighter edges. Primaries, dusky brown, the shafts of the first four white, of the others darker, shading into pale brown; secondaries, paler dusky brown; greater and lesser under wing coverts, chesnut brown, with irregular brown marks. The tail consists of twelve feathers, which are grey, with dark brown bars, edged and tipped with brownish white; upper tail coverts, barred with dark and light shades. Legs and toes, dark green.



WHIMBREL.

WHIMBREL.

LITTLE WHAAP. WHIMBREL CURLEW.

Numenius phæopus,	PENNANT.
" *hudsonicus*,	BRISSON.
" *minor*,	BRISSON.
Scolopax phæopus,	MONTAGU.
Phæopus arquatus,	STEPHENS.
Arquata minor,	RAY.

Numenius. *Numenia*—The New Moon, from the crescented shape of the bill.
Phæopus. *Phaios*—Dark. *Ops*—The countenance.

THIS species is very closely allied to the Curlew, but is not nearly so numerous.

Northward it visits Denmark, Sweden, Norway, Lapland, the Ferroe Islands, and Iceland; and to the south is seen in Italy, Spain, France, Friesland, Holland, Germany, and the Islands of the Mediterranean. In India it has been found in the Himalayan range, Bengal, Java, and the region of the Caucasus; and in Africa, in the northern parts; as also in Madeira. America is given too as one of its countries; so is also New Holland.

These birds are met with not uncommonly on the moors above Sheffield; also, though rarely, near Hebden Bridge, Doncaster, Halifax, and Huddersfield. I once shot one in Dorsetshire, on the sea-coast, near Charmouth. It was a very low tide, and I had to get near the bird as well as I could over the open shore, there being no cover of any sort. In the end, however, I succeeded, much to my self-gratulation at the time. In Norfolk the Whimbrel is common; one was shot at Sutton Marsh, near Wisbeach, on the 9th. of May, 1850.

In Scotland it occurs during the course of migration from the Grampians to Sutherlandshire, and breeds on the Island of Handa, and other parts of Sutherlandshire, in the northern and most retired districts. Sir William Jardine has found it in June, in Kircudbrightshire. In Orkney it is common as a summer visitant, and breeds in Hoy; also in Shetland, in Yell, and Hascosea. In Ireland it is seen only, according to Mr. Thompson, in spring and autumn.

The course of its migration is northwards for the breeding season, about the month of May, and southwards 'au retour,' in the autumn, in July and August; the old birds in the former month, and the young ones in the latter. The flocks advance at a considerable height in the air, and in the form of the letter V reversed.

The Whimbrel, too, delights in summer in the most desolate districts, open moors, and barren tracts, especially those in which watering places occur, and in the winter frequents the sands of the shore, and the mud-banks, and mud or sand-islands of the estuaries of rivers, or of the sea. It, like the larger species, is a very fine bird to eat. More than four or five are rarely seen together, and these probably the brood of the preceding year. They are rather shy in their habits, and a few of the number are posted as sentinels twenty or thirty yards from the main body, and on notice of the approach of any danger given by these, the whole number are in an instant on the wing; young birds are sometimes met with more unwary. During the breeding season, they sometimes perch on a knoll or the low fragment of some decayed or storm-blasted tree. Before rain they are noisy and restless.

This bird feeds on insects, mollusks, and worms, which it procures by probing with its bill in the sands or other soft places; also on small crabs, beetles, and other insects; grasshoppers, crickets, and snails, and the whortleberry, crowberry, and bilberry. When the tide is up, in the season of their sojourn by the sea, they leave the shore temporarily for the adjoining fields, but instinctively return to the former the moment it is again left uncovered.

Yarrell writes, 'Their note is said to resemble the words 'tetty, tetty, tetty, tet,' quickly repeated.' Meyer however, and I think better, renders it by 'twoiwe,' or 'tloiwe,' and also a 'tæi, tæi.'

The nest is a rude couch, placed among the heather on the

open moor, on or by some hillock, or low stump. A few dry grasses are the materials of its composition, and it is scarcely hid from view.

The eggs are four in number, of a dark olive brown colour, blotted with darker brown. They are wide at one end, and much narrower at the other, and are placed in the nest with the pointed ends inwards. They are considered good eating, and being sought for on this account, the numbers of the birds are diminished in consequence. The male and female sit on them by turns. If disturbed from them they make great outcries to distract the intruder. The young leave the nest as soon almost as hatched, and quickly learn to skulk most warily on the approach of danger.

Male; weight, about fourteen ounces; length, one foot four inches; bill, deep brownish black; pale brown, verging to red, at the base of the upper mandible. It is above three inches in length when the bird is fully adult. From its base to the eye is a dark brown streak; above it and over the eye is another light-coloured one; eye-brows, white, streaked with brown; iris, dark brown; eyelids, white. Forehead, brown; head on the crown, dark brown, with a light brown streak passing backwards, occasioned by the feathers being broadly margined with white; on the sides it is white, decked with brown thickly and broadly. Neck on the back and nape, dull brownish or ochreous white, with a dark streak on the centre of each feather; chin, white; throat and breast, pale brown, or greyish white above, on the sides, white, irregularly barred across with brown; below it is nearly white, the feather shafts being neatly streaked in a hair-like manner. Back above, brownish black, the feathers margined with white and ochreous white; on its lower part white.

The wings have the first quill feather the longest. The axillary feathers are barred with brown. Greater and lesser wing coverts, dusky brown, with dull brownish white margins to the feathers; primaries, greyish dusky black; secondaries and tertiaries, dusky, barred with white. Tail, pale brownish white or grey, the centre feathers darker, and transversely barred with six or seven bars of a darker brown; the outside feathers graduate nearly to white; upper tail coverts, white, barred with dark brown; under tail coverts, nearly white, with brown longitudinal streaks. Legs and toes, bluish black or bluish grey; claws, black.

The female has all the pale tints more ochreous. Length,

one foot six inches. The upper tail coverts are seen in her more distinctly barred with brown.

In the young the bill is very short the first year, being not more than one inch and a half or two inches in length. It is said also to become more curved in the advance to the mature state.

SPOTTED REDSHANK

SPOTTED REDSHANK.

DUSKY SANDPIPER. SPOTTED SNIPE. BLACK-HEADED SNIPE. COURLAND SNIPE. DUSKY SNIPE.

Totanus fuscus,	FLEMING. SELBY.
Scolopax fuscus,	MORRIS.
" *totanus,*	PENNANT. MONTAGU.

Totanus—.....? *Fuscus*—Dark—dark brown.

THIS is a native of Europe, North America, and Asia; occurring in India.

Of the present species Pennant records one specimen obtained in the Isle of Anglesea. Montagu notices two, both procured in Devonshire.

In April, 1838, one was found in the Isle of Ely, in Cambridgeshire; one shot near there September 11th., 1851. In Norfolk three near Yarmouth; others have been met with at Breydon; specimens indeed occur every year in that county, chiefly young birds in spring and autumn, but individuals also at other periods of the year. In Yorkshire one was killed about the year 1828, at Braithwell Grange, others on the moors near Whitby, and Hebden Bridge. In Suffolk one near Ipswich; and one at Cavenham the first week in September, 1851. In Sussex one at Eastbourne, the 6th. of the same month. Five were caught in a net at Guyhirn Wash, September the 3rd. and the 6th. In Hampshire one at Oakhanger, in the parish of Selborne, the 30th. of August, 1851.

In Northumberland two. In Cumberland three, two killed near Carlisle, and one near Whitehaven. In Cornwall one in 1840. In Gloucestershire two; others have been purchased

in the London markets. In Scotland, as mentioned by Sir William Jardine, two on the Frith of Forth, about Queen's Ferry.

In Ireland, one in the Bay of Belfast, in August, 1823. In Orkney one was shot by the late William Strang, Esq., in Sanday, in September, 1849.

It breeds in various parts of Scandinavia, Sweden, Norway, Lapland, and Denmark. It likewise is met with in Italy, France, Switzerland, Spain, and Holland. It is also a native of Asia, and has been procured in Siberia, and in India—in Bengal.

It is a sea-shore bird, but occurs likewise still more on the edges of rivers, ponds, and lakes, morasses and water meadows; moist grounds and mud banks being principally suitable to its requirements.

The period of its migration is during April and May in the spring of the year, and from the middle of August to September in the autumn. They are said to move in troops of from five to ten, to twenty or thirty, and at such times to fly very near together, and when on the ground to keep very closely grouped.

It is careful, but not particularly shy, and is tamed without much difficulty, so as even to eat from the hand. Meyer says, 'The Spotted Redshank rests on the ground by the water side, most generally during the day, and also at night, when the night is very dark. Its position during roosting is either standing on one leg, or sitting with its head under its wing. The appearance of this species is very handsome when walking on the ground, and its movements elegant; it can run very fast at pleasure, owing to its long legs. When in the act of feeding, it walks with its beak near the ground, and when it finds some prey, reaches out its neck quickly at some length, and draws it in again immediately. Wading is a daily habit with this species, and when it gets beyond its depth, it swims very readily with ease, and for some distance, nodding at every stroke of its feet; and in diving it excels many water-birds, if urged by the approach of danger in any form.

On the wing the present species is swift and strong; it flies at a great height, and when in the act of alighting, drops itself down in a sloping line, with its wings almost closed, and often in very elegant evolutions.'

It feeds on worms, beetles, and water-insects, and minute

shell-fish; but it is particularly asserted of it, that it is not a 'Vegetarian' in any degree.

Savi, the Italian ornithologist, likens the note to the syllables 'chi-o, chi-o.' Meyer to 'tshuit, tshuit,' quickly uttered.

In this species the plumage of the upper parts is silky and soft in its texture, but those of the under parts close set and downy. Male; weight, about five ounces; length, one foot and about half an inch, to one foot two inches; the bill, long, slender, and a little turned up for about half its length towards the tip, is nearly black in summer, in winter glossy black, except the base of the lower mandible, which, in the former season, is bright red, and in the latter not so bright; in winter there is a dusky streak, and over it again a white one, from the base of the bill to the eye. Iris, dark brown; the eyelid under the eye, white. Head, crown, neck on the back, and nape, in summer, sooty black—in winter, grey; chin, white in winter; throat, in summer, sooty black—in winter, on the front and sides, greyish white. Breast, in summer, black, with white tips to a few of the feathers; in winter, white, and on the sides slightly tinged and streaked with grey. Back above, in summer, sooty black, with white tips and margins; in winter, more grey, below white.

The wings have the first quill feather the longest; the axillary plume is white; when closed, they reach a little beyond the tail: they expand to very nearly two feet. Greater wing coverts, in summer, sooty black, the feathers edged, margined, and tipped with well-defined triangular-shaped spots of pure white; in winter greyish brown, tipped and edged with white in alternate bars; lesser wing coverts, also in summer, sooty black, with the tips and margins white; in winter grey margined with white; primaries, in summer, black, the first with the shaft white; in winter greyish or dusky black; secondaries and tertiaries, in summer, sooty black, with the margins and tips of the feathers white; greater and lesser under wing coverts, white, with dusky grey spots. Tail, in summer, greyish black, with narrow transverse white bars; in winter the middle feathers barred with blackish grey and grey; the outer ones on each side barred with blackish grey and white; upper tail coverts, barred in summer with black and white, in winter with dusky grey and white; under tail coverts, barred with black and white in summer, in winter white. The legs, which are long and slender, and unfeathered

above the knee for about an inch and a half, are as the toes, dark transparent red in summer, in winter red. Claws, black.

The female is rather larger than the male.

In the young of the year the bill is brownish black, the base of the under mandible red; between it and the eye is a patch of white, and below it is another of brown. The head on the sides is mottled with dusky and white in streaks, on the crown as is the neck on the back, tinged with olive brown, generally without spots, but sometimes with a few white edges to the feathers; nape, greyish brown, with pale rusty streaks and spots; chin, white; throat, greyish, with paler rusty streaks or spots. The breast is clouded and spotted or crossed with grey, dusky, and rufous, on a dull white ground; the back above is tinged with olive brown, the margins of the feathers having small triangular spots of white; below it is white. Greater and lesser wing coverts, deep brown, with large triangular-shaped spots of white, or the dark colour may be considered as forming the spots; of the primaries, the first feather has the shaft white, the others brown; the inner webs of the first five are mottled toward the base with grey and dusky, which colouring terminates in triangular-shaped spots towards the centre and tips; secondaries, dusky, the borders of the feathers darkest, and reflected with pale green and purple, and these also still more mottled with grey and dusky; tertiaries, the same, but much darker. Tail feathers, dusky black with black shafts, and darkest towards their edges, barred with greyish white; it is of a double wedge-shape, the middle and outer feathers being the longest; upper tail coverts, white barred with dusky; under tail coverts, dull white, spotted and barred with pale grey, dusky, and rufous. The legs and toes, yellowish orange red, the colour varying with age and season. Claws, black.

REDSHANK.

REDSHANK.

COMMON REDSHANK. REDSHANK SANDPIPER. RED-LEG. RED-LEGGED HORSEMAN. RED-LEGGED SANDPIPER. GAMBET SANDPIPER. STRIATED SANDPIPER. SANDCOCK. POOL SNIPE.

Scolopax calidris,	Pennant. Montagu.
" *Totanus,*	Brisson. Ray.
Totanus calidris,	Fleming. Selby.
Tringa striata,	Latham.
" *Gambetta,*	Linnæus. Gmelin. Latham.

Scolopax—A Woodcock. *Calidris*—.....?

This bird is found in Europe, in Iceland, the Ferroe Islands, Lapland, Norway, Sweden, Denmark, and the Islands of the Baltic Sea; also in Holland, Germany, Italy, Hungary, Greece, and Spain. In Asia it appertains to Persia, Siberia, and Japan, and is said also to belong to North America, about Hudson's Bay, but the Prince of Canino, Lucien Buonaparte, doubts this; and again to Africa, in which latter it is well known and plentiful. With us it is indigenous, but local.

Redshanks are common in Lincolnshire and Suffolk, and are also met with in Dorsetshire, Devonshire, and Cornwall, near Gwyllyn Vase and other places, but rarely; Kent, Durham, Northumberland, and Cumberland. In Norfolk they are also frequent throughout the year, their numbers somewhat increased in spring and autumn by migratory birds on their way to the north or the south. In Surrey one was met with near Godalming. In Yorkshire they breed on Thorne Moor, also near Doncaster, and on Strensall Common, near York. Likewise, though rarely, near Leeds and Huddersfield. They used to be so on the stream near Driffield, but are not seen there now. One was killed at Sessay, near York, in the summer of 1853, as Edward D. Swarbreck, Esq., of Sowerby, has informed

me. In Oxfordshire on the Isis, near Bampton. In Derbyshire small parties occur in the winter near Melbourne. They are met with in Orkney and Shetland throughout the year.

In Ireland they are very plentiful in Dublin Bay, and have been obtained in other parts of the county of Wicklow. They occur likewise in Scotland, in Forfarshire, on the banks of the Solway, at Southerness, and Sutherlandshire, on the banks of Loch Doulich and Loch Naver, also near Lairg, and indeed in all the marshy parts of the hills.

In the winter they frequent the sea shore, delighting in the sandy or muddy flats which are in many places left uncovered by the falling tide of the 'ever sounding and mysterious main;' and in spring they repair to fenny places and marshes, and the borders of lakes, ponds, and pools.

They travel northwards in the months of March and April to their breeding haunts; and southwards from July to the end of September. They move in the evening or by night, the adult birds singly or in pairs, the younger either in families or flocks. It is rare to see more than three or four old ones together. The former are said to progress farther northwards than the latter. They are shy birds, and sometimes try to escape notice by remaining motionless under cover of the uneven surface of the ground.

In running along the sands they exhibit a dipping motion, as may be seen in other birds of the class. 'The ordinary posture of the young Redshank is with the head sunk back between the shoulders, the back of the neck being bare of feathers.' This species is tamed without much difficulty. 'Its attitude when walking is very graceful and elegant; when running it moves about with a wonderfully light step, hardly touching the ground with its feet. It rarely runs, unless it is provoked to do so. It wades, reaching its head down under water at full length, but does not dive or swim by choice. The flight of the Redshank is generally performed with quick motions of the wings, which are not opened at full length, although the bird floats frequently some distance on the wing during the pairing season, in fine still weather. When alighting, it is very beautiful to see this bird, just before coming to the ground, turn up its wings, as pigeons are known to do, and shewing thus the white under surface.'

They frequent the same spots, and take the same flights day after day, and resting on the margin at full tide assemble again on the rocks as soon as left uncovered.

These birds sometimes perch on trees. They can swim well if necessitated to do so. In winter they assemble in flocks, often from a dozen to fifty, and upwards from one hundred and fifty to two hundred, and are then difficult to approach, being always on the look-out and ready to take wing on the slightest alarm. If disturbed while the young are yet unable to fly, they are very vociferous, wheeling about an intruder with a slow quivering flight, and frequently stooping close down, as if to buffet him, whistling shrilly while doing so, with their red legs stretched out behind, or drooping, as if languidly, under them. Indeed at any time, especially if approached unawares, they utter a wild scream of alarm, more or less loud, which, if not intended, is yet taken as a signal by other birds about.

They feed on grasshoppers, beetles, marine insects, and worms, and in search of these bore with their bills in the mud and sand, jumping up and so pressing them in by the weight of their bodies. They likewise eat portions of weeds and mosses.

The call-note of the Redshank is only a 'dgæ, dgæ,' or 'liddle, liddle.'

The nest, of a little coarse grass, is made by the marshy margins of lakes and other uncultivated watery places, on a heap of flags, or in some slight depression, or sheltered by a bush or tuft of herbage, as also, it is said, occasionally on heaths.

The eggs, deposited early in May, are pale reddish white, tinged with green, and blotted, spotted, and speckled with dark red brown, most at the larger end; some varieties with bluish grey. They are four in number. The young are hatched in from fourteen to sixteen days, and immediately quit the nest, under the tutelage of the female bird, the male taking no care of them; they are soon fledged, and able to provide for themselves.

Male; weight, about five ounces, or five and a half; length, nearly eleven inches; bill, in winter brownish black at the point, dark red at the inner part: from its base a dusky streak runs to and over the eye. Iris, dusky brown; over it from the bill is a white streak above the dusky one. Head on the sides, white; in winter greyish white, with narrow brown shafts; on the crown and the neck on the back greyish brown, with olive reflections; in winter greyish brown, with darker shaft streaks; neck in front, white; in spring spotted and streaked with greyish or brownish black, with olive

reflections, which are more distinct towards summer; nape in winter, grey brown. Chin, white in summer, with a few small specks of brown in winter; throat, white, in winter greyish white, with narrow brown shaft lines; breast above, white, slightly streaked; and in spring more spotted and streaked on the sides with brownish black; below white; back above, in spring and summer, greyish brown, with some darker feathers, and tinged with olive; in winter grey brown, with darker shaft streaks; on the lower part in winter, white, or with small dusky specks.

The wings have the first quill feather the longest, they expand to the width of one foot nine inches; the greater wing coverts are in spring, brownish black, with olive reflections, margined with white on the edges, more strongly marked in summer; in winter, greyish brown, margined with white; lesser wing coverts, brownish olive in summer; in winter greyish brown; primaries, dusky; in winter almost black; secondaries, dusky, tipped with white; tertiaries, dusky margined with white; in spring and summer varied with spots of brownish black, and more distinctly so in summer. The tail, of twelve rounded feathers, the centre ones, which are greyish white, being the longest, and giving it somewhat of a wedge-shape, is in winter white, barred across with dusky grey; the upper tail coverts transversely barred with blackish brown and white; under tail coverts, white, in winter with a few slight dusky marks along the shafts of the feathers. Legs, long, and, as the toes, red, in winter paler; their colour is conspicuous both on the ground and in flight; the three front ones are partially webbed, the first and second nearly to the second joint, the second and third only very slightly; claws, black.

After the young are left to themselves the winter plumage begins again to be assumed.

The female is like the male, but somewhat larger; length, about eleven inches.

The young of the year, previous to the assumption of the winter plumage, have between the bill and the eye a large patch of brown, the base of the bill yellowish, the eyebrows white. Neck on the back and nape, grey ash-coloured brown; the feathers with yellowish margins; throat, white, with fine streaks of grey; breast, cinereous, with narrow brown streaks; back, grey ash-coloured brown; the feathers with yellowish margins. The tail with the tips reddish.

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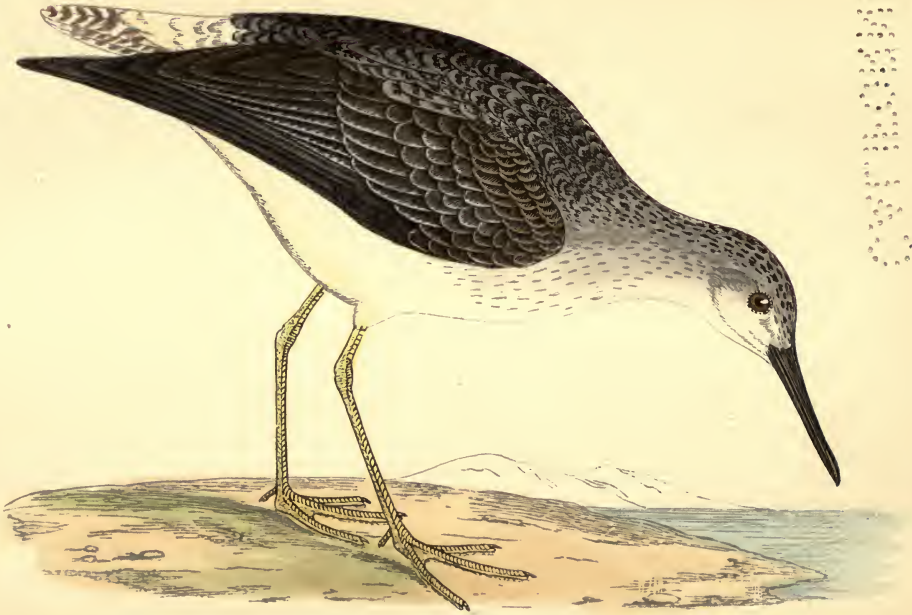


YELLOW-SHANKS.

YELLOW-SHANKS.

YELLOW-SHANKED SANDPIPER. TATLER.

Totanus flavipes, NUTTALL. AUDUBON.
Scolopax flavipes, WILSON.

Totanus—.....? *Flavipes*. *Flavus*—Yellow. *Pes*—A foot.

THIS Sandpiper abounds in North America, in various parts of the United States, and, in fact, from Florida to Labrador.

In this country it has only occurred as a rarity, one having been shot at Misson, Nottinghamshire, near Bawtry, Yorkshire. It was preserved by Mr. Hugh Reid, of Doncaster, an old acquaintance of mine, and purchased by Sir W. E. M. Milner, Bart., M.P. for York.

They migrate northwards in May, 'au revoir' southwards in September.

They frequent the mud banks, wet marshes, and estuaries of the sea-coast; and also have been observed on dry uplands. by the sides of inland streams, and on cultivated grounds, They shew the usual signs of alarm on the nest being approached, flying round the intruder with drooping wings and feet.

They feed on small fishes, shrimps, water and land insects, grasshoppers, and worms.

The note is a sharp whistle of three or four notes, and is uttered when flying and when about to take wing.

Male; length, nine inches and three quarters. The bill is black, the upper mandible rounded towards the point, which projects slightly downwards beyond the end of the lower one; iris, dark brown. Head, crown, neck on the back, and nape,

ash grey, slightly varied with occasional darker-coloured streaks. Chin and throat, white; breast on the middle and lower portion, white, the sides with ash grey streaks; back on the upper part, ash grey, the lower almost black.

The wings have the first quill feather the longest; they reach about half an inch beyond the end of the tail; the axillary plume white; greater and lesser wing coverts, greyish black, the margins of the feathers varied with white. Primaries, black, the shaft of the first white, the others with shafts of light brown; secondaries, greyish black, the edges white. Tail, white, with numerous ash-coloured bands, broadest on the central feathers, which are rather longer than the others, with about twelve narrower bands on each outside one; upper tail coverts, white, those next the back with two semicircular bands of dark grey on a white ground; under tail coverts, white, those next the back with two semicircular bands of dark grey on a white ground; under tail coverts, white. Legs and toes, yellow.

GREEN SANDPIPER.

GREEN SANDPIPER.

WHISTLING SANDPIPER. WOOD SANDPIPER.

Tringa ochropus,	Pennant. Montagu.
" *Aldrovandi*,	Ray.
Totanus ochropus,	Fleming. Selby.

Tringa—.....? *Ochropus*. *Ochros*—Yellowish green. *Pous*—A foot.

There are some birds which always, you know not why, arrest the attention more than others; some, even though not very rare, always seem more interesting objects of pursuit than others, and their acquisition a thing of more value. So it is; but if you 'bid me discourse' as to the reason of it, I have only to confess my ignorance, while I own to the feeling of which I speak. The Green Sandpiper is one of such birds: it is only in a comparatively few instances that I have unexpectedly met with it on the brink of a stream in this or that retired place.

It is a very interesting species, and sufficiently uncommon to be always worth obtaining. It appears to be of extensive distribution, occurring in each of the four quarters, namely, in Europe—in Sweden, and in different parts of Scandinavia, and in Italy, France, Greece, Switzerland, and other parts. In Asia—in Siberia, Persia, India, the country about the mountains of Caucasus, and in Japan. In Africa—in Egypt; and in America—about Hudson's Bay.

In Yorkshire it is occasionally seen near Burlington, York, Hebden Bridge, Huddersfield, and Leeds. One was shot at Low Moor in 1830; one in 1835 near Wasborough, and one in July near Barnsley; one at Temple Thorne, October 28th., 1839; one at Birstal in 1840; one near Escrick, the seat of Lord Wenlock, in August, 1850.

In Norfolk they occur in some numbers both on the coast and in the inland marshy districts; one was shot near Lynn, the beginning of January, 1853. A few well-authenticated instances have been recorded of its breeding in this county. One was obtained by L. H. Irby, Esq., from Saham Tony, in Norfolk, killed near there June 14th., 1853.

They are mostly seen with us in winter, and I am inclined to believe do not altogether leave the country in summer, but only are less noticed from their resorting then to the most sequestered places, there to build.

Specimens have been shot in Cambridgeshire, in May and August. One was shot, as recorded by the Rev. Leonard Jenyns, in the Isle of Ely, between Downham and the Hundred-foot River, on the 28th. of August, 1821. A party of five were seen one summer in Suffolk, near Levington; other six in Norfolk, near Attleburgh. Four young were hatched on the estate of Sir Thomas Beevor, in 1829; one, also a young bird, near Godalming, Surrey; and some young broods, with their parents, were seen near Yarmouth, in the Isle of Wight, the first week of August, 1837. Mr. Selby mentions his having met with them by small rills on the moors near Twizell, in Northumberland, in August; another was also shot in the same county; and two, a male and female, were killed by John Murray, Esq., of Murraythwaite, in Dumfriesshire, near that place in the spring of 1829.

One of these birds, a male, was shot by R. A. Julian, Esq., Senior, on the River Erme, near Plymouth, in Devonshire, on the 15th. of August, 1849; and one, a female, by Mr. R. A. Julian, Junior, on the banks of the Plym, on the 17th. of August, 1850; also a young one, July 31st., 1851, at Crabtree, near the same place. One in Cornwall, near Falmouth, by J. Passingham, Esq., August 28th., 1847; and a pair were obtained near St. Keyme, East Looe. Others, the Hon. T. L. Powys has informed me, used to frequent, in August, the River Nene, near Lilford, Northamptonshire; a few occur most winters about Brighthampton, near Witney, Oxfordshire.

In Ireland a pair, male and female, were procured in the county of Kildare, in October. 1846.

About the end of April or beginning of May the Green Sandpiper moves northwards, and by the end of July begins to retrace its way to the regions from whence it had come, which movement continues till the beginning of September.

It is described as journeying principally alone, or in pairs; six or seven being the most that are seen journeying together, and these generally young birds. Its migration is conducted during the night, from dusk to daylight. 'During the day it frequents the moist banks of rivers, lakes, and canals, but very rarely the sea side, and when disturbed flies invariably to a great distance on its way, either north or south, according to the time of the year, in which direction its destination lies. It flies always at a great elevation, from whence it descends like a stone to the spot where it intends to alight, either for rest or food.'

They are said to be exceedingly good birds to eat. They are of very shy and solitary habits, and do not admit of a near approach, unless it be an unexpected one favoured by the sheltered nature of the cover which they naturally seek. They do not keep to the same spot for more than twenty-four hours.

They are noticeable in flight from the white of the tail and tail coverts.

They run with facile agility, and, if occasion requires, with great swiftness. They fly well and strongly, the wings for the most part being not fully stretched, but quickly moved; before alighting they are almost closed, and the bird shoots down until near the ground, when it makes one or two short turns and then settles. In running along they frequently flirt up and spread the tail. If suddenly startled up they fly off at a low height, following the winding of the stream, at first silently, but then uttering their whistling cry, and mounting high into the air.

They feed on insects, their larvæ, and worms.

The note, a shrill whistle, has been likened to the word 'cheet,' repeated, and also to 'dlee, dlee, dlee,' and also 'dic, dic.' It is one which you will be sure to notice.

The nest is either in sand on a bank, or among grass by the side of a stream.

The eggs, four in number, are of a greenish white ground colour, with dusky or dark brown and light reddish brown and grey spots, more or less dark.

Male; weight, about three ounces and a quarter, or rather more; length, nine inches and a half to nearly ten; bill, very slender, and dull greenish black at the base, the remainder dusky black; from it a pale dusky greyish brown streak proceeds to and over the eye, between which and the base of

the bill there is a dusky patch; iris, hazel, over it from the base of the upper mandible extends a whitish streak. Head on the crown, neck on the back, and nape, dusky greenish brown, slightly waved with a darker shade, and speckled with small triangular white spots or streaks; chin, white; throat, white, streaked downwards with dusky grey and pale greenish arrow-headed lines; breast above, white, on the sides and upper part streaked with greyish black and pale greenish; below, white; back, dusky brownish green, undulated with darker shades, and studded with small triangular-shaped white spots.

The wings have the first quill feather the longest; greater and lesser wing coverts, also dusky green, waved with darker colour; primaries and secondaries, dusky black, the shafts darkest—the latter are very long; tertiaries, also very long, dusky black, tinged with green, and with numerous small light-coloured spots on the outside margins; greater and lesser under wing coverts, deep greyish black, with narrow cross-bars of white of a V, or 'chevron,' shape. Tail, white at the base, the outside feather on each side nearly immaculate, but with one small dark spot or bar on the outer web near the end, the next feather with two dark spots, the third and fourth with two rather large broad dark bands, the fifth and sixth respectively with three or four dark bands; upper tail coverts, white. Legs and toes, greenish grey black; the middle and outer ones are united by a short membrane. Claws, dusky.

WOOD SANDPIPER.

WOOD SANDPIPER.

LONG-LEGGED SANDPIPER.

Tringa glareola,	Pennant. Montagu.
" *Grallatoris*,	Montagu.
Totanus glareola,	Fleming. Selby.

Tringa—.....? *Glareola*. *Glarea*—Sand—pebbles—shingle?

This Sandpiper appears to inhabit divers countries as far north as the Arctic circle, Norway, Lapland, Sweden, and others; it is seen also in France, Italy, and Malta; and has been brought from Africa, from the Cape of Good Hope; and from Asia—from India and Java. It has likewise been procured from Chili, in America; and, it is said, from the Islands of the Pacific Ocean.

Mr. William Felkin, Junior, of Carrington, near Nottingham, has obligingly informed me of the occurrence of this bird in Nottingham meadows; and also on the Trent near that town. One was shot, as recorded in the 'Zoologist,' page 1769, at Yarmouth, Norfolk, in April, 1847; one at Campsall, near Doncaster, Yorkshire; one at Ditton Marsh, in Surrey; a pair were observed on Weald Common, near Epping, Essex, in May, 1840; and one of them, the female, was secured.

Other individuals have been met with in Cambridgeshire, Lincolnshire, Suffolk, and Norfolk. In that county it occurs occasionally at the beginning and end of summer; three young ones, a male and two females, were shot near Yarmouth, on the 22nd. of April, 1852. Two were shot near Beachamwell, one an old female, the other a young bird which had not entirely lost its down, in the spring of 1833. In Northumberland one at Ellingham, in the month of September, 1828; and a second at Prestwick Carr, in 1830. In Durham,

one at Whitemare Pool; in Kent, one near Woolwich, the end of May, 1850. In Cornwall, seven were procured in one day, in August, 1840, near the Land's End, one also there about the 15th. of April, 1852; one was shot by T. Passingham, Esq., at Swanpool, near Falmouth, August 28th., 1847. In Sussex, one at Newhaven, the 9th. of September, 1851, by J. B. Ellman, Esq.

In Ireland a pair were noticed for several successive seasons at Glenbower, near Youghal, in the county of Cork. In Scotland, the eggs are said to have been procured in Elginshire.

It is described as a migratory species, making its appearance early in April and May; and retiring in August and September. It has been seen to perch on the upper twigs of a bush.

Mr. Hoy says, in a communication to Mr. Hewitson, 'If you approach the spot where they have young, and especially if a dog is with you, the old birds will fly round in the most anxious manner, and will hover over the dog within a few feet; then suddenly darting off, mount high in the air, pouncing down again with great rapidity on the intruder.' 'While the hen bird is sitting, the male flies round in wide circles, and at a considerable elevation.'

The name of this species is a misnomer, for, a case literally of 'lucus a non lucendo,' it never frequents woods, unless, indeed, the small copses of birch and alder trees, that skirt large tracts of heath or marshy flats, or willows, and other brushwood, can be so called. Its proper dwelling-places are extensive wastes, interspersed with shallow pools, open grounds, and swamps, and also the shores of large and small lakes and ponds, where grass or reeds grow in patches. It is however not unfrequently seen in company with other kinds of kindred species. Its general appearance is very elegant. It admits of being kept in confinement. It lies close if suddenly approached by danger, but when compelled to be away, rises high in the air, and removes to a distance. It is a bird of solitary habits, a pair only living together at the breeding-time.

In flight it is exceedingly rapid.

They feed on small worms, minute snails, the larvæ of gnats and flies, beetles, and other insects.

'During the time of migration, the peculiar gathering note, 'giff, giff,' may be heard often repeated, forming a concert or

chorus of many voices, and serving to keep together the assembled travellers, until fatigue compels them to alight for rest in some convenient spot. The male bird has, during the breeding season, another call-note, which sounds like 'teatril, teatril.''

The nest, which is extremely difficult to find, owing to the nature of the ground where it is put, is generally placed in a hollow, at but a little distance from the water, among heath, or plants of the bog myrtle, rushes, or grass. It is made of grass or other vegetable materials.

The eggs are three or four, pointed in shape, and of a pale greenish white, spotted and speckled, particularly at the larger end, with dark reddish brown. The hen bird incubates them, and her partner watches by, and rises up, and hovers about any intruder, as previously noticed.

Male; weight, two ounces and a quarter; length, not quite nine inches; bill, slender and black, except the base of the lower mandible, which is pale greenish brown: from the base of the upper one a dusky patch proceeds to the eye—over it is a white streak. Iris, dusky brown; eyelids, white. Head on the crown, neck on the back, and nape, greenish dusky brown, each feather margined with dull buff white, some in a triangular, and others in a more elongated shape, giving the former parts a cinereous hue. In winter the brown on the head more prevails in the way of spots, and the other markings are narrower and more grey. Chin, white; throat and breast above, dull greyish white, streaked with greyish brown waved lines; below, white, and marked on the sides with a few transverse dusky bars; in summer black and more extensive. Back above, dusky, with hardly perceptible tints of green and purple, marked with small white and greyish white spots on each side of the webs near the tip; in summer the dark colour is blacker, and nearly hides the lighter; below the back is white.

The wings have the first quill feather the longest, when closed they reach to the end of the tail. The axillary plume is white, with a few cross-bars of dusky; greater wing coverts, greenish dusky black, margined on the edge of each feather, and tipped with buff white; more inclining to white, some in a triangular, others in a more lengthened manner; in summer the former colour is darker black and more predominant; lesser wing coverts, plain dusky black. Primaries, greenish dusky black, the first one with a white shaft, and most of

COMMON SANDPIPER.

SUMMER SNIPE. SPOTTED SANDPIPER. SAND LARK. SAND LAVROCK.

Tringa hypoleucos, PENNANT. MONTAGU.
Totanus hypoleucos, FLEMING. SELBY.

Tringa—.....? *Hypoleucos.* *Hypo*—Under. *Leucos*—White.

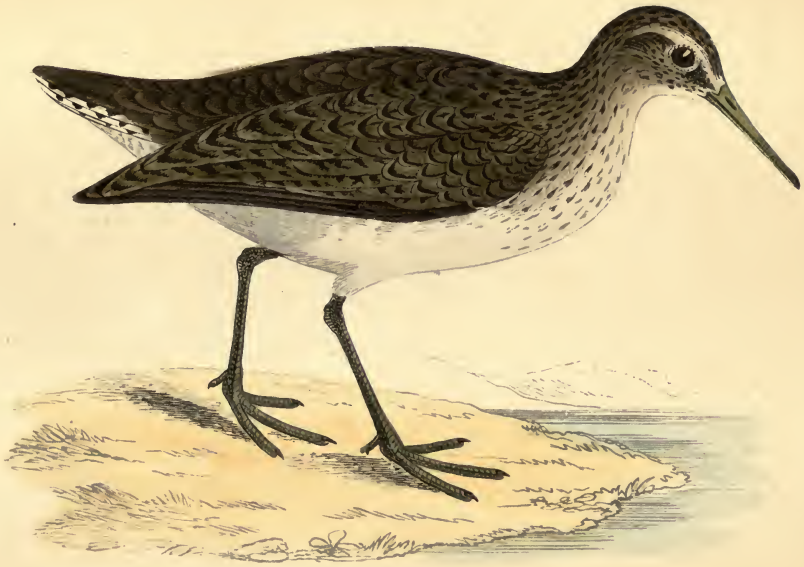
THE species before us is frequent in Europe, throughout Scandinavia, in Lapland and Norway and other parts, and Kamtschatka, and also visits the Ferroe Islands, Greenland, and Iceland: it is known likewise in France and Italy. In Asia it is plentiful in Sumatra, Singapore, Java, Timor, and Japan, India and Asia Minor; and specimens have also been received from the northern and southern parts of Africa.

The Common Sandpiper is generally known throughout this country—from Cornwall, Devonshire, Dorsetshire, Hampshire, Kent, Essex, Cambridgeshire, and Oxfordshire, where small parties occasionally pass the summer near Brighthampton, Witney, Mr. Stone writes me word, to Norfolk, Durham, and Northumberland, and from Wales to Scotland, being plentiful on the inland lakes—Loch Awe and others, in Caithnesshire, Sutherlandshire, and elsewhere.

In Yorkshire, localities for it are, among others, the neighbourhood of Sheffield, Hebden Bridge, Halifax, Barnsley, Huddersfield, and Burlington.

In Orkney it has been observed in several islands, as Sanday and Hoy, and also on various parts of the mainland. It appears, however, to be but an occasional visitant there.

In Ireland it is a regular visitor in the summer.



SANDPIPER.

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CALIFORNIA

The Summer Snipe visits us in April, about the 20th., and leaves us by about the end of September, or earlier—in August—according to the state of the season. They arrive singly or in pairs, and travel by night. Before starting they fly about in a restless manner, uttering their whistling note.

It is a bird of lively and active habits, and it is pleasant to watch it running nimbly along the water's edge, by the side of a still lake or pond, or the bank of the rapid or the slow stream, the large or the small river, in the summer time, or treading lightly over the beautiful leaves of the water-lily, which float so buoyant themselves on the crystal surface. It is seldom seen on the shore of the sea, but the situations mentioned are all alike congenial to its taste, whether in a hilly or a flat country, an open or a wooded district. It can both swim and dive well; even the young, if need appear to be, take fearlessly to the water, and remove underneath the surface to a considerable distance. One has been known thus to seek and find safety from the pursuit of a Hawk. The wings are used in progression underneath.

It is almost constantly in motion, and has, like so many other birds, a habit of flirting its tail up and down, while the head and neck are thrust forward in a nodding manner, or again retracted during the search for food. If disturbed during the period of incubation, 'the female quits the nest as quietly as possible, and usually flies to a distance, making at this time no outcry; as soon, however, as the young are hatched, her manners completely alter, and the greatest agitation is expressed on the apprehension of danger; and every stratagem is tried, such as feigning lameness, and inability of flight, to divert the attention of the intruder from the unfledged brood:' both parents indeed are clamorous at this season, ignorant of the worldly maxim that 'speech was given to us to conceal our thoughts.' These birds perch at times on roots and stumps by the water side. Small flocks of a dozen or fourteen may at times be seen together, or up to twenty or thirty; but they do not associate very closely or determinedly together, each individual following its own inclination, both when on the ground and in flying off, or alighting.

It flies with ease and celerity; if to a distance, at a moderate height; but if otherwise, it proceeds a little way, and commonly settles on the opposite side to that which it had left. 'Its flight,' says Selby, 'is graceful, though peculiar,

being performed by a rapid motion of the pinions, succeeded by an interval of rest, the wings at the same time being considerably bent, and forming an angle with the body; and in this manner it skims with rapidity over the surface of the water, not always flying in a straight line, but making occasional sweeps, uttering at the same time its shrill and well-known whistle.' When settling down, the wings are at some seasons kept up stretched over the back, and in this position it runs along the sand, uttering the while its plaintive whistle. Sandpipers may at times be seen running along the grass by the river side, stretching themselves out, and ruffling their feathers in an odd sort of manner.

They feed on worms and insects, such as flies, gnats, and water spiders, and on minute snails, but rarely. In search of some part of their food they thrust their bills into the mud.

The note, a clear pipe, is, though pleasant to the ear, a mere 'wheet, wheet, wheet,' uttered when the bird is put up, as well as when perched on some stone, branch, or stake, near the water side. Meyer likens it to the syllables, 'heedeedee, heedeedee.' It is repeated a great number of times—as many as forty or fifty—by the bird when on the wing.

Nidification commences about the middle of April.

The nest is slight—a collection of a few leaves or a little moss, dry grass or leaves, in a hollow in a bank, in a tuft of grass, or tussock of rushes; upon a bed of gravel, or even on a bare rock; the eggs being kept together by only a very slight inequality in the surface. It is generally thus sheltered or protected, on one side at least. It is usually built near the water's edge, but sometimes in an adjoining field, always above the highest water-mark. It is well hidden in a tuft of grass or rushes, or among the lower branches of willows and osiers, so as to be difficult to find. The same pair, if undisturbed, will return for several successive seasons to their accustomed building-place.

The eggs, four in number, are of a reddish white or cream yellow tint, spotted and speckled with dark brown, and other marks of a lighter hue. Some are of a clear very light blue ground colour, with minute brown spots all over; others with large blots of deep brown. They are, as the eggs of other waders, admirably adapted, both by their form and position in the nest, to occupy the smallest possible degree

of space, as rendered expedient by their large size in proportion to that of the bird. The young are hatched in about fourteen days, and leave the nest almost immediately. They quickly learn to hide themselves in the nearest covert, and in about a month are able to shift for themselves.

The plumage in this species is of a silky texture. Male; weight, about two ounces; length, seven inches and a half, to seven and three quarters; bill, yellowish brown, or dusky greenish grey at the base, dark brown towards the tip. Iris, slender, and dusky brown, paler towards the base; a brown streak runs to it from the base of the bill, and above it, reaching also over and behind the eye, is a light-coloured one. Head on the sides and on the crown, neck on the back and nape, greenish brown, clouded with bluish grey and dull yellowish, and delicately marked with a dusky greenish black stripe along the centre, and along the shaft of each feather. Chin and throat, white; throat on the sides, and breast on the upper part, pale greenish, with dusky black streaks; the lower white. Back, greenish brown, each feather with a darker dusky greenish black stripe across its centre and along the shaft, and further varied with fine transverse zigzag lines of dark brown, giving the bird an elegantly mottled appearance.

The wings, which are very long, have the first feather the longest; their extent of expanse is from one foot two inches to one foot two inches and a half; greater wing coverts, tipped with white. The lesser wing coverts have in summer a black border near the tip of each feather, which appears to be wanting in the winter plumage. Primaries, nearly black, each, except the first one or two, with a greyish white patch on the centre of the inner web. The tail has the four centre feathers dusky greenish brown, with a dusky greenish black stripe across the centre and along the shaft line of each; the four outer feathers on each side, there being twelve in all, tipped with white; and the two outermost on each side with the outer web dull white, or pale brown, barred with greenish black. The whole tail is thus barred; the middle feathers are the longest, and the others gradually shortened. Upper tail coverts, also greenish brown, with the like dusky greenish black streaks along the shafts and across; under tail coverts, white. Legs and toes, pale bluish green or yellowish grey, with transparent brown at the joints; the latter are webbed to the first joint, and have

a brief membranous edging along their whole length. Claws, dark brown.

The young are at first covered with down of a greyish brown colour above, with black streaks upon the head, and a black list down the back, the under parts being white. In the course of three weeks they are able to fly. The young of the year have the white streak over the eye more distinct. The neck in front, white, with the dark streaks on the sides only. The back with the feathers edged with reddish buff, spotted with black. The greater and lesser wing coverts, darker.

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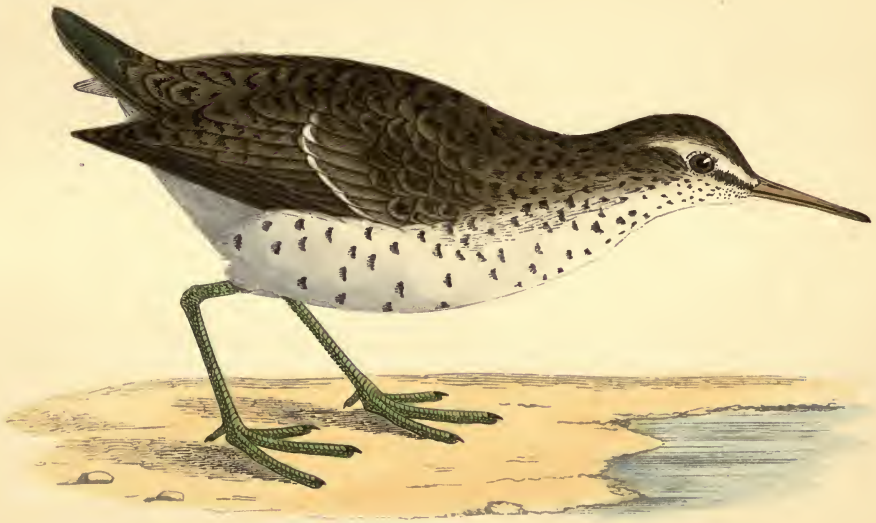

SPOTTED SANDPIPER.

SPOTTED SANDPIPER.

Tringa macularia,	PENNANT. MONTAGU.
Totanus macularius,	SELBY. JENYNS.
" *macularia,*	TEMMINCK.

Tringa—.....? *Macularia. Macula*—A spot.

THIS bird appears frequently in the north of Europe, in Sweden, and the Islands of the Baltic, and also in Germany. In America, it is common from Labrador and Canada to Texas, Mexico, and the Islands of the West Indies.

One was shot on the coast of Norfolk, between Runton and Sherringham, about the 26th. of September, 1839.

It is a migratory species, moving southwards in October, and northwards in the spring.

The Spotted Sandpiper exhibits the like anxiety for its young which so many other kinds do, and developes it in the same manner—in endeavouring, by every device, to draw away intruders. Audubon mentions the fact of one of these birds, which he had disturbed, having removed two eggs from the nest, which contained four, and this although he had, with a view to their subsequent procurement, placed stones over the nest in such a manner as that it was impossible she could have bodily entered it. She must, as I have shewn elsewhere of another species, have abstracted them with her bill.

The Spotted Sandpiper is to be found in summer in woody districts, by the edges of lakes, and as well along the side of a meandring river, or the pebbled margin of some small 'streamlet or rill,' which gently follows its downward course along the bank of a shelving copse or the quiet side of a flat meadow. It is rarely seen by the sea-side.

The nest is placed in some well-hidden spot in a field,

and is composed of short pieces of dry straw, or other such materials as furnished by the locality.

The eggs are of a pale reddish white colour, spotted and speckled with grey and brown of a darker and lighter shade. They are four in number. The young, as soon as hatched, run about with wonderful speed.

Male; length, about six inches and three quarters or over; upper bill, dusky; the under one dusky towards the tip, and dull yellowish red about the base; a dusky streak goes from it to and behind the eye. Iris, dusky; the eye-streak, white; forehead, white. Head on the crown, neck on the back, and nape, olivaceous brown, marked with dusky spots of an elongated form on the feathers; neck on the sides, chin, throat, and breast, white, with numerous distinct round spots and transverse marks of dusky greenish brown on the sides of the last-named; below, white. Back above, olivaceous purple brown; in winter many of the feathers are black, with greyish white margins, the rest grey, marbled with pale brown, having the shafts alone black; below, white.

The wings have the first quill feather the longest; greater wing coverts, grey, with darker centres to the feathers, and tipped with white, some of the lesser wing coverts also grey, with darker centres. Of the primaries the first is brownish black, the shafts of it and the next, white; the rest with a white spot on the middle of the inner web; secondaries, tipped with white; tertiaries, grey, with black shafts, and barred upon the outer part of the webs with black and pale ash grey; in winter margined with white, and faintly barred with a deeper shade of brown. The tail has, in summer, the two middle feathers greyish white; in winter, white, marked with zigzag lines and bars of pale brown; the outer feathers wholly white, except a longitudinal streak of brown upon the outer web. The outer feather on each side has the outer web white, barred with greenish black; upper tail coverts, white, in summer barred with brown. Legs and toes, greenish grey; claws, dusky brown.

The male and female are nearly alike.

The young are at first covered with dull yellowish brown down, with a streak of black behind the eye, and one down the back. Subsequently indications of the spots appear, and they shew themselves ostensibly in the winter.

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GREENSHANK.

CINEREOUS GODWIT.

Scolopax glottis,	Pennant. Montagu.
" *canescens,*	Pennant. Gmelin. Latham.
Totanus glottis,	Fleming. Selby.
Limosa grisea,	Brisson.
" *glottis,*	Stephens.

Scolopax—A Woodcock. *Glottis. Glotta*—A tongue—having a long tongue?

In Europe, the Greenshank visits Russia and Scandinavia generally, Norway, Denmark, Sweden, and Lapland, Germany, France, Holland, Switzerland, and Italy. In Asia, it occurs in Siberia, Asia Minor, and Persia, India, Java, Sunda, the Moluccas, and the Mauritius; and on the continent of Africa, in Egypt and Nubia.

In Cornwall, W. P. Cocks, Esq., in 'The Naturalist,' volume i, page 114, records one shot at Swanpool, near Falmouth, in the winter of 1845. In Yorkshire two have been killed near Doncaster. In Norfolk it occurs in the spring in moderate numbers, leaving about the end of May, and is again found in the months of September and October. In Surrey one was shot at Hampton Lodge: in Cambridgeshire it used to occur, but since the drainage of the fens has become very rare. At Towyn, North Wales, one, early in September, 1851. One at Swanscombe, in Kent, in 1848, by R. O. White, Esq.

In Ireland, they are seen in small parties in the autumn: one was obtained near Louth, in October, 1845.

In Scotland, they assemble in large numbers in the Hebrides —in Uist, Harris, and Lewis. They also visit Orkney in

September and October, on their way southwards; one was killed in Sanday, October 2nd., 1830. One in Haddingtonshire, at Lennoxlove, 1824.

They are met with on the sea-shore, but also on the banks of rivers, lakes, and ponds, both in flat and hilly countries. With us, individuals have occasionally been met with inland. One was shot near Ascot Heath; one near Godalming, in Surrey. Three or four were seen near Carlisle, about Brugh and Rockliff, in August, 1832; and two of them, a young male and female, were procured on the 25th.; one also on the River Eden earlier in the same month. Others in Oxfordshire, near Bampton, on the River Isis, and near Brighthampton. A few stay to breed. One was shot by the River Thames, near Walton, in Surrey, in the month of June. In Scotland one was shot in May, and the young have been seen on the banks of Loch Awe, in July.

They move northwards in April, and southwards in October or November. Some remain in the wilder districts of Scotland during the summer, and rear their brood; as for instance, in Sutherlandshire, near Tongue and Scourie, Loch Naver and Loch Laighall. Mr. Selby has met with the young on Loch Awe, in July, and has known an adult bird killed in May. Sir William Jardine has known others on the banks of the Tweed, between Kelso and Coldstream, a reach of the river I well remember for salmon-fishing exploits.

They are extremely shy and vigilant, and rise on the slightest alarm, especially when they have young, wheeling round, now near to the nest, and now sweeping farther off with loud cries, and every now and then perhaps alighting and still repeating them. They prefer open districts, such affording opportunities of keeping a good look-out; and choose sluggish streams and still waters to more rapid ones. In searching for food they move leisurely in a horizontal position, and wade deep. They can swim and dive well, and advance under the water with movements of their wings. In confinement they soon become tame. They are sociable in their habits, both among themselves and with other kinds.

These birds occasionally perch on trees. They fly with the wings not widely stretched, the head advanced in front, and the legs behind. They alight in a slanting direction, and often so swiftly that they have to break the fall, and skim a short distance with the full expanse of the pinions.

Their 'Commissariat department' is supplied with small fish,

such as the loach and the smelt, insects, worms, shrimps, and several crustaceous and molluscous animals.

The note is uttered both on the wing and when perched on the ground or a twig. It sounds like the word 'tea-ah, tea-ah!' repeated two or three times in quick succession: the voices of several together are rather melodious.

The nest is a small hollow, with a few fragments of heath or grass placed within it.

The eggs, of a pear shape, as in the kindred species, are four in number, of a very pale yellowish green colour, sprinkled all over with irregular spots of dark brown and blots of light purple grey, with fewest of either on the smaller end.

Male; weight, about six ounces; length, about one foot or over, to one foot two; bill, about two inches long, slender, and slightly curved upwards. It is nearly black at the tip, and bluish green over the base; a dusky streak extends from its base to the eye, and spreads over the head on the sides in small spots, commingling with those of a larger size on the upper part of the breast and the sides; iris, rather dark brown. Head on the crown, neck on the sides and back, and the nape, dusky, with paler edges to the feathers; in winter the ground colour is pale bluish grey, the latter-named with the shafts and centres of the feathers dusky; chin, white. Throat and neck in front, white, slightly streaked with grey; breast, white, on the sides streaked with grey; back above, greyish brown, the feathers edged, more finely in winter, with buff white; in the early summer plumage the ground colour assumes a greenish or bluish black tint; below it is white.

The wings have the first quill feather the longest. Two white bands are formed across them by the white tips of the greater coverts. They expand to the width of two feet and an inch; greater wing coverts, grey brown, glossed with green, edged triangularly, and in winter finely pencilled, with buff white, the former become towards summer varied with dark spots; lesser wing coverts, also greyish brown. Primaries and secondaries, uniform dusky black, the inner webs of some spotted with white; in winter dusky on the upper edges. Tertiaries, also dusky greyish or brownish black, tinged with green, edged triangularly, some of them on both webs, with buff white. In the breeding plumage they become darkly spotted. Tail, white, the middle feathers barred across, and the outer one striped longitudinally with greyish white; upper

tail coverts, white, with a dusky spot or bar on each feather near the tip: the shafts are dusky; under tail coverts, white. Legs, very long and slender, and as the toes, bluish olive green; claws, dusky black.

Rennie writes, 'A very elegant variety, in the possession of Mr. Bullock, had the upper parts marked as usual, but darker, and the spots larger on the top of the head, back, and scapulars; the newly moulted feathers on the two last, known as such by their comparative brightness, were black, with the margins deeply and angularly scalloped with white; the markings strong, particularly on the tertials; tail coverts, white; the rump having a mixture of dusky black and grey in bars; the tail barred with zigzag lines; throat, white; fore part of the neck and breast, streaked and spotted with black, the spots increasing in size on the breast; middle of the belly, white, but feathers on the side barred with black; some of the under tail coverts plain white, others barred with black; the legs appeared to have been yellowish or pale green; size and length of the bill and legs as usual. It was not noticed at what season this bird was shot, but it was most probably in the spring, a little before its usual time of departure, and it had just begun to throw out its summer plumage on the back, scapulars, and wing coverts, where the spots were larger, and much better defined than on the old intermediate feathers.'

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AVOCET.

AVOCET.

SCOOPER. COMMON AVOCET. SCOOPING AVOCET. YELPER. CROOKED-BILL. COBBLER'S-AWL DUCK.

Recurvirostra avocetta, FLEMING. SELBY.
" *avosetta*, PENNANT. MONTAGU.

Recurvirostra. *Recurvus*—Crooked—bent.
Rostrum—The beak of a bird. *Avocetta*—.....?

THIS bird, unique, as far at least as our country is concerned, in the singularity of its appearance, is in Europe plentiful in the north of Holland and on the shores of the Baltic, and also occurs in Sweden, Russia, Holstein, Hungary, Switzerland, Spain, France, and Italy. In Africa it has been found from Egypt to the Cape of Good Hope; and in Asia —in Siberia, Asia Minor, and India; the neighbourhood of the Black Sea, the Caspian Sea, and in Tartary.

In Yorkshire, two were formerly obtained on Skipwith Common, near Selby; several have been met with near Spurn Point, and on other parts of the coast, and the banks of the Humber.

Sir Thomas Browne has recorded that Avocets were common in his time in Norfolk; and within the present generation, as many as twenty are said to have been received within one month of one year, in Leadenhall market. They used to frequent the marshes at Winterton; a pair were taken at Yarmouth, the 22nd. of April, 1852; two also in the month of June, 1851. It used to be more common there on Breydon, but has of late years become more rare. It has been known to breed at Salthouse. One was obtained in the spring of 1837. They were formerly also met with on the Durham coast. A specimen was shot some years since at

Croxby Lake, Lincolnshire, as the Rev. R. P. Alington has informed me, by the late Theophilus Harneis, Esq., of Thorganby Hall. In Cornwall, two have been killed at Swanpool, near Falmouth, one of them in November, 1845; others formerly have been noticed in Gloucestershire and Shropshire.

In Sussex, Markwick says that it was not uncommon in his time, 1795, on the coast in summer; and he met with a pair which had young, in a marsh near Rye. It also visited the shore at Bexhill, A. T. Dodd, Esq., of Chichester, saw a flock of five at Pagham Harbour, near there, and procured three of them. In Surrey, one at Godalming is recorded. In Kent, Romney Marsh used to be a locality for it there; and the muddy flats at the mouth of the Thames, in that county, and 'over the water' in Essex. In the former-named a nest of young ones was found in 1842, by Mr. Plomley, and two young ones procured the following year; one was shot at Sandwich, the 22nd. of April, 1849. Donovan mentions that they were formerly common in the Cambridgeshire Fens. In Devonshire, one was obtained near Plymouth, in November, 1854, as John Gatcombe, Esq. has been kind enough to send me word.

In Ireland, as stated by the late William Thompson, Esq., of Belfast, it is a very rare visitor.

In Scotland, it is in like manner an occasional straggler. In Orkney, it is stated by Edmonston to have occurred.

The mouth of the Severn, in Gloucestershire, is given as another of its 'quondam' localities; also Shropshire, Fossdike, in Lincolnshire, and the Dorsetshire coast.

It is of migratory habits, arriving in this country, that is, when it does arrive—for, though formerly a regular and frequent visitor, it is not so now—in the month of April; and leaving again in September. Its migration is performed during the night.

It prefers muddy shores to those of a sandy or rocky kind; also salt marshes, to which it resorts while the tide covers its other feeding-grounds, but leaves again for the latter when it has ebbed sufficiently. The Avocet walks in an easy and graceful manner, and is able also to run very fast; 'which,' says Meyer, 'it does invariably close to the water's edge when pursued, standing every now and then still, raising its head sharply, and lowering it again, and at last, if the pursuit is kept up, it flies up high in the air, and leaves the neighbourhood. Swimming may also be ranked among its capacities,

during which exercise it nods with its head at every stroke; but it seems to like to float rather than to swim.'

'The flight of the present species is very different from that of most others of its family, owing in part to its bending its wings into perfect arches during their movements; the wings are either beaten in quick succession, or more moderately, according to the pleasure of the bird. During the breeding-season they fly great distances, low over the surface of the water, but pursue their migratory journey at a great elevation. The form of the Avocet, when on the wing, is particularly strange, in consequence of the head being drawn close to the body, with the beak bent somewhat downwards, and the legs projected out very far behind. On alighting, it opens its wings, for a moment, high above the back, and then closes them very carefully.'

When the female is frightened off the nest, she flies round and round with drooped legs and extended neck, counterfeiting every sign of disablement, and crying out with alarm, or the desire to distract attention. They are quick and active in their movements. Avocets are sociable birds among themselves, but shy in their general character. They travel usually in small numbers, but sometimes unite in large flocks. They build in companies. Montagu writes, 'The singular form of the bill led Buffon, according to his absurd atheistical tendency, to suppose it to be 'one of those errors or essays of nature, which, if carried a little further, would destroy itself; for if the curvature of the bill were a degree increased, the bird could not procure any sort of food, and the organ destined for the support of life, would infallibly occasion its destruction.' The bill of the Avocet may therefore be regarded as the extreme model which nature could trace, or at least preserve. The modern doctrine of 'types' seems to be a legitimate descendant of this nonsense.'

They feed on aquatic insects, embryo crustacea, shrimps, and worms, and in search of these wade deep or not as the case requires, but usually keep near the edge. The manner in which they obtain their prey appears to be by scooping with the concave part of the bill, from side to side in a zigzag manner in the sand, and also in the water. A good deal of gravel is swallowed with the food.

The note or pipe is likened to the syllables 'kwee, kwee,' or 'twit, twit.'

The nest is said to be made in a hollow on some dry spot

in a marsh, or on a bank, just above high-water mark, among the short grass, or other marine vegetation. It is lined with a little of those materials. The eggs are described as being usually two, but sometimes three or four in number, brown or greenish white, spotted and speckled with black. The young are hatched in eighteen days, and leave the nest almost immediately. If chased, they hide themselves, with much success, among the scanty cover.

Male; weight, from twelve to fourteen ounces; the usual weight is thirteen; length, nearly one foot six inches. The bill of this elegant bird, at once its 'decus et tutamen,' is adapted by the all-wise Providence of GOD, for the prosecution of the individual instinct with which He has endowed it; it is about three inches and a half in length, and black in colour, and curved upwards, and somewhat flexible; iris, deep reddish brown; over it there are sometimes a few white feathers in a line, and sometimes there is a little white on the forehead. Head on the crown, neck on the back, and nape, black; chin, throat, and breast, white; back on the upper part, black; on the lower, white.

The wings have the first quill feather the longest, when closed they reach rather beyond the end of the tail, and when extended measure two feet and a half across; lesser wing coverts, black; primaries, black. Legs, long, stout, and delicate pale blue, or blue grey; the toes are of the same colour; they are semipalmated, that is, the three front ones; the hind one is only rudimentary. The whole plumage is smooth and compact.

The female is about one foot five inches in length. In other respects she is like the male.

In the young of the year, the bill is dusky; iris, dusky; the black parts of the plumage are tinged with brown, and during the second year, till the autumnal moult, some of the feathers are still reddish brown at the end.

The quantity and distribution of the black colour in the Avocet varies in different specimens.

UNIV. OF CALIFORNIA

STILT.

STILT.

BLACK-WINGED STILT. STILT PLOVER.
LONG-LEGS. LONG-LEGGED PLOVER. LONG-SHANKS.
BLACK-WINGED LONG-SHANK.

Himantopus melanopterus,	Selby. Jenyns.
" *Plinyi,*	Fleming.
" *atropterus,*	Meyer.
" *rufipes,*	Bechstein.
Charadrius himantopus,	Pennant. Montagu.

Himantopus. *Himantopodes*—'Birds so called from the tenderness of their legs.' *Melanopterus.* *Melas*—Black. *Pteron*—A wing.

This curious bird belongs to Italy, France, Germany, Spain, Russia, Hungary, Greece, and Sardinia, in Europe. In Africa, to Egypt in the north, occurring also southwards; and in Asia, to India, Japan, Java, Persia, and the neighbourhood of the Caspian Sea and the Black Sea; that district, one spot of which is now for ever to be famous, as where 'Di tanti palpiti, e tante pene,'—'Alma gloria!'

Specimens have been obtained in Devonshire and the Isle of Anglesea; in Dorsetshire, near Poole; and in Hampshire, near Havant. White, of Selborne, mentions five or six killed out of a flock of seven on Frensham Pond, between Farnham and Woolmer Forest; and Pennant instances one procured near Oxford. In Cornwall, one was shot at Swanpool, near Falmouth. In Norfolk, one was seen by the Rev. Richard Lubbock near Hickling Broad, on the 9th. of June, 1822, and was shot the following day; a pair were shot by Mr. Salmon, at Stoke Ferry, in Norfolk, in the spring of 1826; one was killed in the same county, in July, 1824.

Before the complete drainage of the fens, says the Rev. R.

P. Alington, a few were now and then met with in Lincolnshire; one was sent up from there to the London market in July, 1844. The more common times, however, for the appearance of the species in this country are the spring and winter. In Cambridgeshire, they were formerly plentiful in the fens.

In Scotland, two specimens were recorded by Sir Robert Sibbald, as having occurred; and two others are mentioned by Mr. Don, as having been met with, one on the mountains of Clova, and the other on Ben Lawers, in Perthshire. In Orkney two specimens were killed at Lopness, in the year 1814.

In Ireland, one was seen by Mr. Robert Ball, near Youghall, in the winter of 1823.

It is a migratory species, and is described as working its way north in May, and southward as early as August; its movements being made during the night. On these occasions it sometimes flies at a high elevation.

The Stilt frequents the margins of lakes and ponds, and the borders of extensive watery wastes, and attaches itself to the same haunts, returning the next day if disturbed from any such. It is not particularly shy, but nevertheless is not easily approached.

Its long legs are adapted not only for rapid progression, but also for wading to a considerable depth. They are carried, in flight, straight out behind; and at the same time the 'wings are much bent down, the neck not much extended, with the beak pointing downwards. Its flight is not quick, but steady and regular.'

It feeds on worms, water insects, beetles and other winged species, and has been seen to catch the latter in a very dexterous manner as it stands in the water. It also captures the small fry of fish, which it obtains by dipping the head and neck wholly under the water.

A round hollow on the top of some tuft or mound serves as a receptacle for the nest.

The eggs, as represented by Professor Thieneman, are of a pale blue colour, blotted and streaked with greyish green, or olive green and dark brown.

Male; weight, about four ounces and a half; length, about one foot one inch, or a little over—to one foot two inches; bill, black—it is two inches and a half long, and slender. Iris, red; there are a few dusky grey or light-coloured streaks

behind it and on the back of the head: with this exception, the head on the crown, neck, and nape, chin, throat, and breast, are white, the last-named with a faint pink tinge on the lower part; back, brownish black, tinged with green.

The wings have the first quill feather the longest; greater and lesser wing coverts, primaries, and secondaries, rich glossy black, tinged with green; tertiaries, dark brownish black, with green reflections. The tail is greyish brown, and slightly forked. The legs, which are of great length, and slight, and the toes, pink red; the latter have a connecting membrane between the outer and middle ones.

The female has more dark streaks behind the head, and the black of the plumage is less pure, and not tinged with green.

The young have more of the dark streaks on the head; the back, brown, edged with white. Legs, orange.

BLACK-TAILED GODWIT.

COMMON GODWIT. GODWYN. YARWHELP. YARWHIP.
LESSER GODWIT. JADREKA SNIPE.
RED GODWIT. HUDSONIAN GODWIT. SHRIEKER.

Limosa melanura,	Leisler. Temminck.
" *Ægocephala,*	Fleming.
" *rufa major,*	Brisson.
Fedoa melanura,	Stephens.
Scolopax belgica,	Gmelin.
" *Ægocephala,*	Linnæus.
" *Hudsonica,*	Latham?
" *limosa,*	Pennant.
" *Lapponica,*	Bewick.
Ægocephalus Bellonii,	Ray.

Limosa. *Limus*—Mud. *Melanura.* *Melas*—Black. *Oura*—A tail.

This species extends pretty generally, though unequally, over Europe—so far north as Iceland, Lapland, and Greenland, and south again to Spain, Switzerland, Italy, and Holland; Asia, to which continent Temminck assigns Japan and the Sunda Isles as localities for it, as well as the vicinity of Mount Caucasus and Persia; and Africa, about Tangiers, Tunis, and other parts of the north.

It most affects the countries that are nearest to the sea, and attaches itself to moist and swampy places, low meadows, where a rank vegetation prevails, and other such.

In England it is generally distributed, though by no means abundant. It breeds occasionally, though sparingly, in the Cambridgeshire and Norfolk Fens, near Buckenham and Oby; so it is also said to have done on the edge of Hatfield Chase, near Thorne, Yorkshire. It is common about Breydon, near Yarmouth, in Norfolk; it belongs also to the Northumbrian, Lincolnshire, and Yorkshire coasts. In Suffolk, two in

BLACK-TAILED GODWIT.

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full summer plumage were shot in a fen near Wisbeach, May 4th., 1850.

In Cornwall, one was shot at Swanpool, near Falmouth, by Mr. May, December 12th., 1846. In Surrey, it has occurred near Godalming; in Devonshire it has been obtained. In Bedfordshire, at Cardington; also in Derbyshire, one on Sinfin Moor.

In Orkney it is a rather rare winter bird, during which season it appears in small flocks.

In Ireland it is an occasional visitant, and has been obtained near Dublin, in October.

Its haunts in winter are the oozy banks of the larger estuaries, and the mouths of rivers..

They arrive in March in the places where they intend to rear their young. They move by night, and then unite in companies of perhaps forty or fifty individuals, but at other times are unsociable among themselves, as well as shy, excepting when interested for their brood, whom they endeavour to obtain security for by flying about any intruder. The young birds shew great dexterity in hiding themselves.

They are highly esteemed for the table, and are both shot and taken in snares.

'In flight it opens its pointed wings at full length, and beats the air in regular succession; but when hurried, its wings are only half opened, and the strokes become very quick, whereby its speed is very much increased. Its walk is not unlike that of the Stork, and when at rest, it invariably stands on one leg.' When asleep, it generally 'puts its head under its wing.'

The Godwit feeds on insects and their larvæ, and worms, obtained by boring in the soft sand and mud with its long bill, not only when the surface is uncovered, but also under the water, immersing the head for the purpose. It follows its vocation early in the morning and late in the evening, and, of course, longer during moonlight nights.

The note has been compared to the syllables 'grutto, grutto, grutto.'

About the beginning of April they arrive at their nesting-places, and begin to lay early in May, in the rough parts of swamps, and low meadows near water, the nest being composed of dry grass, and other wild plants, and hidden among any coarse herbage.

The eggs are four in number, of a deep green or light

olive brown colour, faintly blotted with spots of a darker shade.

As soon as the young are able to flutter about, the old ones leave them to themselves.

Male; weight, about twelve ounces; length, one foot four inches, to one foot four and a half; bill, fine orange at the base, in winter pale yellowish brown, the tip black—it is bent a little upwards, and is three inches and a quarter long; from it to the eye is a dark streak, the effect of some small black spots on feathers of a reddish brown. Iris, dusky; over it is a white patch; forehead, pale reddish white; head on the sides, pale reddish brown; on the crown, reddish brown streaked with black; neck, pale reddish brown. Chin, reddish white; throat and breast above, pale reddish brown, in winter paler, transversely barred with brownish black; below white, barred at distant intervals with pale reddish brown and blackish brown. Back, almost black, each feather margined and barred with orange reddish brown tinted with purple; in winter it is pale brown, the feathers darker along the centres.

The wings have the first quill feather the longest; greater and lesser wing coverts, deep brown, the edges paler, deeply margined with white, shewing at the tips, forming a bar crossing the wing; primaries, blackish brown on the outer webs and tips, shading nearly to white on the inner, the shafts strong, broad, and yellowish white, with some white also at the base of all except the second, forming a bar across the wing; tertiaries, long, and clear brown, darker along the centres, and sometimes more or less variegated with orange red, the edges being lighter-coloured. The tail, which is slightly forked, is black, the bases of the feathers for one third of their length white, increasing gradually on each from the centre ones to the outside, where the black scarcely covers more than half an inch of the end; upper tail coverts, white; under tail coverts, white. The legs, which are bare of feathers for a considerable space above the knee, are, as the toes, blackish grey; claws, black.

The young, before the first moult, have the streak over the eye white; crown of the head, blackish brown, each feather margined with pale reddish brown; neck, greyish ash-colour, tinged with reddish brown; chin, white; breast above, greyish ash-colour, tinged with reddish brown; below it is white, clouded with greyish ash-colour; back, brownish black, each

feather being margined with reddish brown. Greater and lesser wing coverts, greyish ash-colour, margined and tipped with reddish white; primaries, white at the base. The tail is white at the base; upper and under tail coverts, white.

The plate is after a design by the Rev. R. P. Alington.

BAR-TAILED GODWIT.

COMMON GODWIT. RED GODWIT. MEYER'S GODWIT.
GODWYN. GREY GODWIT. RED-BREASTED SNIPE.

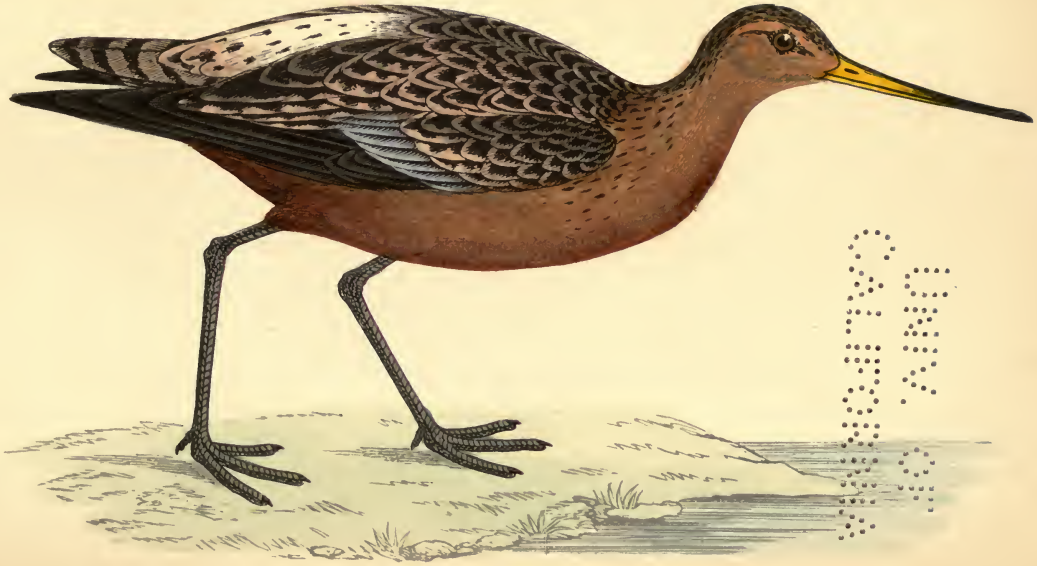
Limosa rufa,	BRISSON.
" *grīsea major*,	BRISSON.
Fedoa rufa,	STEPHENS.
" *Meyeri*,	STEPHENS.
" *pectoralis*,	STEPHENS.
Scolopax leucophæa,	LATHAM.
" *noveboracensis*,	MONTAGU.

Limosa. *Limus*—Mud. *Rufa*—Red.

THIS handsome bird is in Europe found, though rarely, in Italy, also in France, Spain, and Switzerland, while migrating, and a few breed in Holland and Germany. Mr. Yarrell says, 'It visits Finland, and the countries to the eastward, but is very rarely seen on the islands, or on the western shores of the Baltic.' Meyer writes, 'We are credibly informed by an eye-witness, that the numbers of this species that visit the western coast of Denmark, during the month of May, on their passage to the north, are so great that it is impossible to give a numerical description of them; the islands between the mouth of the Elbe and the western coast of Jutland are perfectly covered with them, and at low water the shores are covered, in parts, to such an extent that the eye cannot compass their lines. On the eastern shores of Denmark it is remarkable how few are met with, comparatively speaking.' Linnæus mentions Lapland, and Thieneman Norway, as other countries for it.

In Asia it is found about the Caspian Sea, and in India, and the Indian Islands, Java, and Timor.

In England, it occurs on the Durham and Northumbrian



BAR-TAILED GODWIT.

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coasts, and small flocks are seen in Cornwall, Devonshire, and Kent, in Romney Marsh, and on the coast; also in Suffolk and Norfolk. In Derbyshire one near Swarkeston.

In Scotland it is known on the banks of the Solway, and by the Wampoole, and the Merse at Skinburness. It has also been obtained near Perth.

In Orkney, it is not a very rare winter visitant.

In Ireland, Mr. Watters says that it is common as a winter visitant. He gives Wicklow as a locality.

In Yorkshire, it has been obtained near York and Doncaster, and at Haw Park, near Walton. One also at Hawksworth Hall, near Otley, in May, 1839. It is not uncommon on the sands in the winter.

The Rev. R. P. Alington has shot this bird on the Lincolnshire side of the Humber. In Cambridgeshire it appears to have been met with. In Norfolk it occurs about Breydon, near Yarmouth, and also along the coast in considerable numbers.

They move northwards in April, to rear their young, returning again in the autumn.

They are valued for their edible qualities. They are usually found in small societies, and frequent the muddy banks of inlets of the sea, the mouths of rivers, 'flowing ever for the benefit of man,' and not for his only, but also for that of the infinity of the creatures of God's hand; the borders of ponds, ditches, and lakes, and swampy marsh lands generally. They often mingle with other birds of the same class. 'During high water, the Bar-tailed Godwits retire to the neighbouring meadows and fens, where they appear ever restless, looking out from time to time whether the sea water retires, and as soon as they become satisfied that some land re-appears, they fly up in a body, and continue to follow the receding waters together, in search of their favourite food.'

Their flight is powerful, though not very rapid; on alighting, they generally elevate their wings over the back just before touching the ground. They can run fast, but for the most part move about in a steady and graceful manner, the body being carried in a horizontal position.

They feed on worms, aquatic insects, and minute shell-fish, and in search of such wade deep, but do not swim or dive unless on necessity.

The note, uttered when alarmed to take flight, somewhat resembles the bleat of a goat.

The egg is described as of a pale yellowish brown colour, speckled, blotted, and spotted with other darker shades of brown.

Male; weight, about twelve ounces; length, not quite one foot four inches; bill, pale yellowish red, or reddish brown at the base, succeeded by brown, and the rest blackish brown; it is curved upwards, and is not unfrequently as much as seven inches in length; the space between the bill and the eye is spotted with black. Iris, dusky brown; over it is a reddish white streak; the lower eyelid is white. Forehead, head on the crown, neck on the back, and nape, pale reddish orange brown streaked with blackish brown; in winter, greyish white streaked with pale brown. Chin, throat, and breast, reddish brown, the latter on the lower part with the feathers finely margined with white, the sides streaked with dark brown; in winter the chin and throat are greyish white, tinged with dull yellow, as also is the lower part of the breast. Back on the upper part, blackish brown with a tinge of purple, with oval-shaped spots of pale reddish orange, with which the feathers are also margined; on the lower part it is white with a few small dark feathers; in winter the upper half is fine grey, margined with a paler shade, the shafts and parts immediately adjoining greyish black.

The wings have the axillary feathers white, cross-barred in summer; greater and lesser wing coverts have the feathers with dark brown centres, and edged with greyish white, in winter white with the centres brown; the primaries have the outer webs almost black, the inner ones dusky brown mottled with white on the outer edges, the shafts white. The tail is marked with alternate irregular bars of deep dusky brown and reddish white, in winter with dusky brown and greyish white; upper tail coverts, white, the centres of the feathers dark brown, some few of them margined with orange brown; sometimes the tail coverts are entirely rufous in summer—in the former state they are very conspicuous in flight; under tail coverts, partially streaked with dark brown. Legs and toes, blackish grey, or dark greyish green; they are bare of feathers a long way above the knee. Claws, nearly black.

The female is larger than the male, her length reaching to one foot five inches, or five and a half.

The young, before the first change, have the bill frequently

not more than two inches and a half in length, the base pale yellowish red; the streak over the eye, and the head on the sides, white, with small pale streaks of brown; on the crown, streaked with dark brown; throat, white; breast above, grey, tinged with brown, and faintly tinged with a darker shade of brown, below white, tinged with yellowish grey; back above, brown, the feathers deeply margined and spotted with pale ochreous yellow, on the lower part white with a few spots of brown. Tail, barred with brown and white; upper tail coverts, white, with a few spots of brown.

RUFF.

REEVE, (FEMALE.) FIGHTING RUFF. SHORE SANDPIPER. EQUESTRIAN SANDPIPER. YELLOW-LEGGED SANDPIPER. GREENWICH SANDPIPER.

Machetes pugnax,	GOULD. SELBY.
Tringa pugnax,	PENNANT. MONTAGU.
" *equestris*,	LATHAM.
" *littorea*,	LINNÆUS. LATHAM.
Totanus cinereus,	BRISSON.

Machetes—A Warrior. *Pugnax*—Pugnacious.

THE Ruff is one of the most curious birds, if not the most curious, of any that we have in this country.

In Europe, its range extends to Iceland, Russia, Sweden, Lapland, Denmark, and Norway, from Holland, France, Switzerland, and Italy, in which latter countries however it is only a passing traveller. In Malta too, they thus occur. In Asia, it advances to Siberia, from Persia, and the Caucasian Range. In Africa, it is known at the Cape.

This species was formerly common on some low ground between Louth and the Lincolnshire coast, but the Rev. R. P. Alington has not heard of any for several years. The same may be said of Yorkshire, especially the East-Riding; and likewise of Norfolk, in which county it still continues to breed, but in greatly diminished numbers. In the county of Northumberland, a small flock frequented Prestwick Carr, near Newcastle-on-Tyne, and Mr. Heysham observed young birds in the neighbourhood of Carlisle, in the autumn of 1830 and 1832. They used to be met with on Hatfield Moor, near Thorne, and Skipwith Common, near Selby. Before the drainage of the Carrs they were common. One was shot near York, and Mr.

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RUFF.

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Thomas Allis writes that he has known of others. In Somersetshire they formerly occurred in the fens near Bridgewater. In Cambridgeshire, they used to frequent, though much more plentifully some years than others, the Isle of Ely, and occasionally the Bottisham and Swaffham Fens. In Surrey, a considerable flight of these birds, apparently all of them young ones, was found near Godalming, on the 20th. of August, 1836.

They occasionally visit Ireland. Two males and two females were procured at Kildare.

In Scotland, stragglers have not unfrequently been met with. Sir William Jardine has obtained specimens on the shores of the Forth, from Holy Island, northwards, and also on the Pentland Hills, and the banks of the Solway. In Orkney they have been observed. There they have generally made their appearance about September. They were very abundant in Sanday, in the month of September, in 1830, 1835, and 1837.

The fens have heretofore afforded their favourite locality, but they have also been met with upon the moors, and on mosses, and in salt marshes, and still more frequently along the coast, on their passage to and fro.

They arrive, or used to arrive, in April, and leave in September, many thus staying the summer and rearing their young. Some indeed have done so recently, at Cawlish Wash, near Spalding, in Lincolnshire, in which county, other localities used to be the fens near Boston and Spilsby, and the neighbourhood of Crowland. A few have been found occasionally in the winter; one near Slapton, in Devonshire, on the 27th. of December, 1808.

The young are fully fledged by the end of August, and assemble in August or September, to depart in company with the old females, the males leaving by themselves a few days sooner.

These birds are excellent eating, and are easily fattened in confinement for the purpose. Great numbers were formerly taken in nets in the fens, for the table, in the month of September; but there are now but few to be found, from this and other causes. A fen-man told Pennant that he had caught six dozen in one morning; and ten dozen were sent in the same day to Leadenhall market, in the year 1824. The catching of them was a regular business, though confined only to a few families. One family, that of Towns, had been in the trade a hundred years in the time of Montagu. The

price latterly was two guineas a dozen; and Bewick records that in a bill brought in for a dinner at the George Inn, Coney Street, York, August 18th., 1794, where four Ruffs made one of the dishes at the table, they were separately charged sixteen shillings. I will take the opportunity of recommending the house as a good old-fashioned comfortable inn, well conducted by the landlord, Mr. Winn, in whose family, as he happened to tell me yesterday, it has been for seventy years.

The Ruff is very pugnacious in its habits, that is, the male, in the breeding season; the female being 'causa teterrima belli,' so long since the times of Paris, of Priam, and of Troy, as well as so long before. In these challenges they mount on some little knoll, which often becomes quite trodden down by their feet—a tilting ground for the display of 'Love and Courage.' At other seasons of the year they live peaceably together. Even in confinement however they exhibit a most combative disposition, and when fed would starve if not separately supplied with food, quarrelling over anything like a common table: with other species, nevertheless, they seem to keep up amicable relations in confinement.

Selby says, that 'their actions in fighting are very similar to those of a game cock; the head is lowered, and the beak held in an horizontal direction, the ruff, and indeed every feather more or less distended, the former sweeping the ground as a shield, and the tail partly spread, upon the whole, assuming a most ferocious aspect.' He adds, that in these attitudes, the combatants stand opposed to each other, attempting to lay hold with their bills, and if this is effected by a leap, the wings are then brought into offensive action. As might be expected from the nature of the weapons, their contests are not often attended by fatal consequences. This, however, does sometimes occur, as Montagu mentions an instance in which the bird died from an injury in the throat, got in one of its feuds when in confinement.

They are not particularly shy in their habits. Small flocks of the young birds keep together in the autumn.

Ruffs are polygamous, and hence, as in other similar cases, their quarrelsome habits. When the eggs are laid the hen birds become very bold in their care, but the Ruffs continue as shy as before.

They feed on worms and aquatic insects.

The Reeve begins to lay the first or second week in May, and the young are hatched the beginning of June. The nest

made of coarse grass, is placed on some hillock among the same, or sedge, or rushes.

The eggs are subject to considerable variety; some are of a beautiful green ground colour, others olive brown, spotted with darker brown. They are four in number.

The Ruff, that is, the male bird, for the female, the Reeve, is not, like him, 'varium et mutabile semper,' is subject to greater varieties of plumage than any other British bird. Two specimens are rarely to be found alike—'nil fuit unquam sic impar sibi.' Buffon says that Klein compared above a hundred together, and found only two that were similar.

Weight, about six ounces—to seven and upwards; length, one foot and half an inch. The bill is very firm and hard at the tip, but more flexible at the base; its colour varies from brown or yellowish brown to black; iris, dusky brown, behind it is a tuft of long erectable feathers. Head on the crown, glossy purple black, with chesnut bars; on each side is a tuft of elongated feathers, and the head is carunculated at the same time that the neck in front and on the sides is furnished in the way of a ruff or frill, with an accession of produced feathers, finely glossed, which reach their full length the middle or end of May: these are lost again after the season of incubation, beginning to fall even in June. They vary in an endless manner, no two being found exactly alike, and some differing most widely. The bird presents a totally different appearance with and without the ruff—'alter at idem.' Its appropriate colour is shining purple black, barred with chesnut, but white, yellow, and rufous shades also prevail. The breast above, next to the ruff, chesnut, the feathers tipped with black; on the lower part it is white; back, pale chesnut, the feathers speckled and tipped with black.

Greater wing coverts, nearly uniform grey brown; lesser wing coverts, pale chesnut brown, speckled and tipped with black; primaries, brownish black, the shafts white; some of the tertiaries are pale chesnut, tipped and speckled with black. Tail, greyish brown, the four middle feathers varied with chesnut and black; upper tail coverts, white; under tail coverts, white. Legs and toes, pale yellowish brown; claws, black.

The female is about one third less than the male; length, ten inches and a half; bill, dark brown about the tip, paler at the base; iris, dusky brown. Head, crown, and neck,

grey brown, the centre of each of the small feathers darker than the edges, giving a mottled appearance. The feathers of the neck in front are black in the centre, with broad greyish white margins. Chin, greyish white. The breast above and on the sides, has black centres to the feathers, the edges being broadly marked with greyish white; on the lower part it is white; back, nearly black, with broad grey brown margins to the feathers. The wings have the first quill feather the longest; some of the greater wing coverts are barred across with pale reddish brown; the others and the lesser wing coverts, nearly black, with wide edgings to the feathers of greyish brown; primaries, dull black, their shafts white; secondaries, dusky black, edged with pale brownish white. Of the tertiaries some are barred transversely with pale reddish brown, the others nearly black, with wide grey brown margins. Tail, grey brown, barred across with pale reddish brown and black; upper tail coverts, white; under tail coverts, white. Legs and toes, pale yellowish brown; claws, black.

The young, when covered with down, are spotted. In their first year's plumage they resemble the female, 'but have a tint of reddish grey about the breast, and a general dusky colouring over the upper parts, where the feathers are edged with pale rust-colour; the under parts are white; the beak is black, and the legs and feet oil green.' The ruff is acquired in the second season.

The plate is taken from a drawing by the Rev. R. P. Alington, Rector of Swinhope, Lincolnshire.

END OF VOL. V.

B. FAWCETT, ENGRAVER AND PRINTER, EAST LODGE, DRIFFIELD.

In Course of Publication.

THE TEMPLE ANECDOTES.

BY

RALPH & CHANDOS TEMPLE.

WITH ILLUSTRATIONS BY EMINENT ARTISTS,

ENGRAVED BY THE BROTHERS DALZIEL.

"Keep unshak'd
That temple, thy fair mind."
Shakspere.

Mankind, it has been observed, love anecdotes. The conversation, whether of lettered men or of men of the world, is made up of them; the books which most delight are the books which abound in them. In long narratives of history and biography the portions best remembered are always those which illustrate some point of character, develop in action some new truth, or record some discovery or invention in a brief passage. These are strictly Anecdotes; and thus by a sort of winnowing process the minds and memories of readers, where the labour is not already performed for them, may be said to reduce all narratives to anecdotal form.

Forty years ago "The Percy Anecdotes" delighted our fathers; forming one of the earliest and most successful attempts to supply good popular literature, at a price which till then had been rarely associated with any but publications of an exceptionable character.

Readers have not only multiplied enormously since 1820, but every reader is now critical to an extent which the writers of that day little foresaw. Forty years, indeed, yield but a faint idea of the world's progress since that time. Another England has been added to our numbers, and the moral and material prosperity of all is considerably higher. But it is, perhaps, only by taking a few of the more striking points of comparison that an adequate idea of this progress can be attained.

We require to be reminded that in 1820 the streets even of the metropolis were unlighted with gas, and practically unguarded by night; that our gigantic railway system, on which more than a thousand millions sterling have been sunk, had not then turned its first sod, or built its earliest arch; that photography was unknown, and electric telegraphs unimagined; that only fifty millions of letters then passed in one year through our post-offices, which now conveys at least five hundred millions in the same space of time; and that no daily paper was then published in England at a lower price than eightpence, while even an almanack of any kind could not be purchased for less than a shilling; and innumerable appliances and arts, less striking to the imagination than some we have mentioned, though now no less important in their effects upon human welfare, were still unknown.

THE TEMPLE ANECDOTES will be a *shrine* in which Happy Thoughts, Good Words, and Noble Deeds, shall have a place. The aim of its Editors will be not only to be worthy of these later and better times, but also in some measure to reflect them. Though not always Biographical,

THE TEMPLE ANECDOTES will generally connect themselves with one of the names to which we are indebted for this progress and improvement. Although we shall not always confine ourselves to the last forty years, or even to the present century, our view will generally be to illustrate later times in all their aspects of Literature, Art, and Science; and we shall therefore rarely carry our readers a hundred years back.

Seeking always to entertain and instruct, we shall publish at regular periods a volume which, opened at any page, will have something to attract, while it leaves in the mind of the reader one or more of those current coins of knowledge, without which no one can conveniently mingle in the world. Taken as a whole,

THE TEMPLE ANECDOTES,

Ranging over nearly every department of Human Knowledge, will, we hope, form a sort of panoramic view of the History of English Civilization in its latest and hitherto most important period.

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